JAN

Access DB# 84785

# SEARCH REQUEST FORM

**Scientific and Technical Information Center**

Requester's Full Name: FONDA Examiner #: 71970 Date: 1-21-03
Art Unit: 1623 Phone Number 30 Serial Number: 09/964178
Mail Box and Bldg/Room Location: CM1 8B19 CM1 8A05 Results Format Preferred (circle): PAPER DISK E-MAIL
**If more than one search is submitted, please prioritize searches in order of need.**
**********

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): See attached assignment sheet

Earliest Priority Filing Date: 9-25-01

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please search composition comprising glucosamine and an analgesic per cl 1-13, and method of using it to alleviate pain per cl 14-16.

Thanks.
K.

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

**********

| STAFF USE ONLY | Type of Search | | Vendors and cost where applicable | |
|---|---|---|---|---|
| Searcher: | NA Sequence (#) | | STN | |
| Searcher Phone #: | AA Sequence (#) | | Dialog | |
| Searcher Location: | Structure (#) | | Questel/Orbit | |
| Date Searcher Picked Up: 1/27/03 | Bibliographic | ✓ | Dr.Link | |
| Date Completed: 1/27/03 | Litigation | | Lexis/Nexis | |
| Searcher Prep & Review Time: | Fulltext | | Sequence Systems | |
| Clerical Prep Time: 15 | Patent Family | | WWW/Internet | |
| Online Time: 30 | Other | | Other (specify) | |

PTO-1590 (8-01)

BEST AVAILABLE COPY

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=> d his

     (FILE 'HOME' ENTERED AT 10:34:45 ON 27 JAN 2003)
               SET COST OFF

     FILE 'REGISTRY' ENTERED AT 10:34:56 ON 27 JAN 2003
L1             3 S 3416-24-8 OR 29031-19-4 OR 66-84-2
               E .ALPHA.-GLUCOSAMINE/CN
L2             1 S E4
L3             1 S 6490-70-6
               E .BETA.-GLUCOSAMINE/CN
L4             1 S E4
L5             1 S 14257-69-3
               E N-ACETYL-D-GLUCOSAMINE/CN
L6             1 S E3
L7           297 S (7512-17-6 OR 3416-24-8 OR 6490-70-6 OR 14257-69-3)/CRN
L8            37 S L7 AND (7664-93-9/CRN OR CLH)
L9             8 S L8 AND 2/NC
L10           12 S L1-L6,L9
L11            1 S IBUPROFEN/CN
L12            1 S KETOPROFEN/CN
L13           18 S C13H18O2/MF AND 46.150.18/RID AND 1/NR AND BENZENEACETIC AND
L14           13 S L13 AND 2 METHYLPROPYL
L15            3 S L14 AND IBUPROFEN
L16           15 S L13 NOT L15
L17           12 S C16H14O3/MF AND 46.150.18/RID AND 2/NR AND BENZENEACETIC AND
L18            3 S L17 AND KETOPROFEN
L19            9 S L17 NOT L18
L20            6 S L11,L12,L15,L18
               SEL RN
L21          426 S E1-E6/CRN
L22            2 S L21 AND L7

     FILE 'HCAPLUS' ENTERED AT 10:44:09 ON 27 JAN 2003
L23         9874 S L10
L24        27519 S ?GLUCOSAMINE? OR ACETYLGLUCOSAMINE OR ACETYL (1W) GLUCOSAMINE
L25        29352 S L23,L24
L26         8313 S L20
L27         8906 S IBUPROFEN OR KETOPROFEN
L28        10023 S L26,L27
L29         4491 S NSAID
L30        11691 S (NONSTEROID? OR NON STEROID?)(L)?INFLAM?
L31        49473 S ANALGES?
               E ANALGESIC/CT
               E E6+ALL
L32        27328 S E5
L33        54026 S E5+NT
               E E22+ALL
L34        17760 S E5+NT
               E ANTIINFLAM/CT
               E E5+ALL
L35        19798 S E2
               E E2+ALL
L36        24177 S E4,E5
L37        28056 S E3+NT
L38           36 S L25 AND L28
L39          329 S L25 AND L29-L37
L40           23 S L38 AND L39
L41           36 S L38,L40
               E ANTIARTHRITIC/CT
               E E4+ALL
L42         4488 S E5,E4+NT
               E ANTIHISTAMIN/CT
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Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

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L43          1153 S E5-E7
                  E E4+ALL
L44          6793 S E5,E4+NT
                  E MUSCLE RELAXANT/CT
L45          5669 S E4-E10
                  E E4+ALL
L46          8857 S E5,E6,E4+NT
                  E DECONGESTANT/CT
L47           431 S E4,E5
                  E E4+ALL
L48           431 S E4
                  E BRONCHODIAL/CT
L49          5474 S E7-E9
                  E E7+ALL
L50          9708 S E5,E4+NT
L51         66379 S ANTIARTHRIT? OR ANTIHISTAMIN? OR ANTI()(ARTHRIT? OR HISTAMIN?
L52           147 S L25 AND L42-L51
L53           120 S L52 AND L39
L54            13 S L52 AND L41
L55            13 S L40 AND L54
                  SEL DN AN 3 10 11
L56             3 S E1-E9
L57           131 S L41,L52,L53 AND L23
L58            26 S L57 AND L26
L59            23 S L58 NOT L56
L60            15 S L59 NOT L55
                  SEL DN AN 11
L61             1 S L60 AND E10-E12
L62             2 S L22
L63             6 S L56,L61,L62
                  E RAFFA R/AU
L64           177 S E4-E9
                  E COWAN A/AU
L65           236 S E3-E15,E17,E20,E21
                  E TALLARIDA R/AU
L66           103 S E4-E6
L67             1 S L64-L66 AND L25
L68             6 S L63,L67 AND L23-L67
                  SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 11:00:56 ON 27 JAN 2003
L69            11 S E1-E11
L70            10 S L69 NOT C16H25NO2
L71             1 S L69 NOT L70

=> fil reg
FILE 'REGISTRY' ENTERED AT 11:01:43 ON 27 JAN 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   24 JAN 2003  HIGHEST RN 481628-73-3
DICTIONARY FILE UPDATES:  24 JAN 2003  HIGHEST RN 481628-73-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.
```

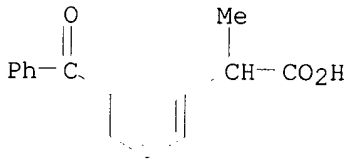
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d l70 ide can tot

L70 ANSWER 1 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **246858-10-6** REGISTRY
CN D-Glucose, 2-amino-2-deoxy-, 3-benzoyl-.alpha.-methylbenzeneacetate (salt) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl-, compd. with 2-amino-2-deoxy-D-glucose (1:1) (9CI)
FS STEREOSEARCH
MF C16 H14 O3 . C6 H13 N O5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

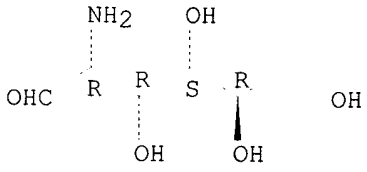
CRN 22071-15-4
CMF C16 H14 O3



CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 131:291311

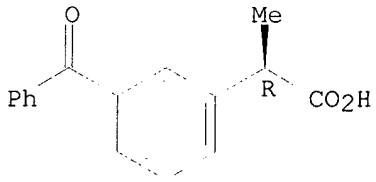
L70 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **237742-82-4** REGISTRY
CN D-Glucose, 2-amino-2-deoxy-, (.alpha.R)-3-benzoyl-.alpha.-methylbenzeneacetate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl-, (.alpha.R)-, compd. with 2-amino-2-deoxy-D-glucose (1:1) (9CI)
FS STEREOSEARCH

MF C16 H14 O3 . C6 H13 N O5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 56105-81-8
CMF C16 H14 O3

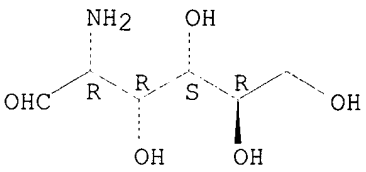
Absolute stereochemistry. Rotation (-).




CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

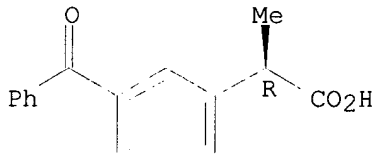



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 131:161659

L70 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **56105-81-8** REGISTRY
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl-, (.alpha.R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl-, (R)-
OTHER NAMES:
CN (-)-2-(3-Benzoylphenyl)propionic acid
CN (-)-3-Benzoyl-.alpha.-methylbenzeneacetic acid
CN (-)-Ketoprofen
CN (2R)-2-(3-Benzoylphenyl)propionic acid
CN (R)-(-)-Ketoprofen
CN (R)-2-(3-Benzoylphenyl)propionic acid
CN (R)-3-Benzoyl-.alpha.-methylphenylacetic acid
CN (R)-Ketoprofen
FS STEREOSEARCH
MF C16 H14 O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CEN, CHEMINFORMRX, CIN, DRUGNL, DRUGPAT, DRUGUPDATES, IPA, PHAR, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

307 REFERENCES IN FILE CA (1962 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
309 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:11225

REFERENCE 2: 137:375140

REFERENCE 3: 137:261988

REFERENCE 4: 137:257005

REFERENCE 5: 137:241443

REFERENCE 6: 137:169291

REFERENCE 7: 137:162942

REFERENCE 8: 137:124232

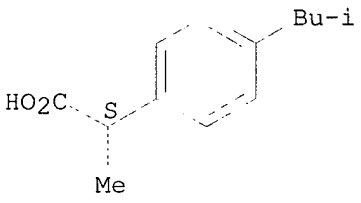
REFERENCE 9: 137:83751

REFERENCE 10: 137:68303

L70 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **51146-56-6** REGISTRY
CN Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)-, (.alpha.S)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)-, (S)-
OTHER NAMES:
CN (+)-(S)-Ibuprofen
CN (+)-(S)-p-Isobutylhydratropic acid
CN (+)-.alpha.-Methyl-4-(2-methylpropyl)benzeneacetic acid
CN (+)-Ibuprofen
CN (+)-Ibuprophen
CN (S)-(+)-2-(4-Isobutylphenyl)propionic acid
CN (S)-(+)-4-Isobutyl-.alpha.-methylphenylacetic acid
CN (S)-(+)-Ibuprofen
CN (S)-2-(4-Isobutylphenyl)propanoic acid
CN (S)-2-(4-Isobutylphenyl)propionic acid
CN (S)-2-(p-Isobutylphenyl)propionic acid
CN (S)-Ibuprofen
CN d-Ibuprofen
CN Dexibuprofen
CN Seractil

FS STEREOSEARCH
MF C13 H18 O2
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DRUGPAT, EMBASE, IPA, MEDLINE, PHAR, PROMT, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry. Rotation (+).




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

762 REFERENCES IN FILE CA (1962 TO DATE)
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
762 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:65749

REFERENCE 2: 138:16628

REFERENCE 3: 138:16626

REFERENCE 4: 138:16625

REFERENCE 5: 138:8366

REFERENCE 6: 137:369829

REFERENCE 7: 137:369804

REFERENCE 8: 137:369721

REFERENCE 9: 137:359575

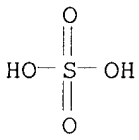
REFERENCE 10: 137:299925

L70 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **29031-19-4** REGISTRY
CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN D-Glucosamine sulfate
CN DONA
CN Glucosamine sulfate
FS STEREOSEARCH
DR 216447-61-9
MF C6 H13 N O5 . x H2 O4 S
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PHAR, PROMT, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

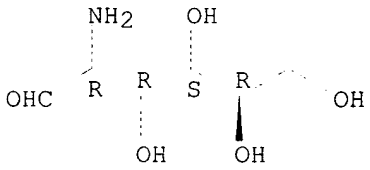
CRN 7664-93-9
CMF H2 O4 S



CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



123 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
125 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:32807

REFERENCE 2: 138:8364

REFERENCE 3: 137:358197

REFERENCE 4: 137:345779

REFERENCE 5: 137:329479

REFERENCE 6: 137:268432

REFERENCE 7: 137:241878

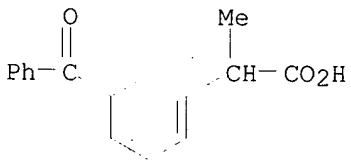
REFERENCE 8: 137:222118

REFERENCE 9: 137:222055

REFERENCE 10: 137:210995

L70 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **22071-15-4** REGISTRY
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Hydratropic acid, m-benzoyl- (8CI)
OTHER NAMES:

CN (.+-.)-2-(3-Benzoylphenyl)propionic acid
CN (.+-.)-3-Benzoyl-.alpha.-methylbenzeneacetic acid
CN (.+-.)-Ketoprofen
CN (.+-.)-m-Benzoylhydratropic acid
CN (RS)-Ketoprofen
CN .alpha.-(3-Benzoylphenyl)propionic acid
CN 19583RP
CN 2-(3-Benzoylphenyl)propionic acid
CN 2-(m-Benzoylphenyl)propionic acid
CN 3-Benzoyl-.alpha.-methylbenzeneacetic acid
CN 3-Benzoylhydratropic acid
CN Alrheumun
CN Aneol
CN Bi-profenid
CN Capisten
CN Epatec
CN Ketoprofen
CN Ketoprofene
CN Ketoprophen
CN Ketorin
CN m-Benzoylhydratropic acid
CN Orudis
CN Oruvail
CN Profenid
CN R.P. 19583
CN Racemic ketoprofen
CN RU 4733
FS 3D CONCORD
DR 172964-50-0, 22161-86-0
MF C16 H14 O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGPAT, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

2897 REFERENCES IN FILE CA (1962 TO DATE)
90 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2906 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:61373

REFERENCE 2: 138:61369

REFERENCE 3: 138:60879

REFERENCE 4: 138:49359

REFERENCE 5: 138:44736

REFERENCE 6: 138:37373

REFERENCE 7: 138:33289

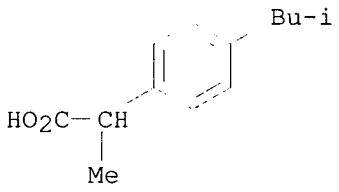
REFERENCE 8: 138:32500

REFERENCE 9: 138:16628

REFERENCE 10: 138:16626

L70 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **15687-27-1** REGISTRY
CN Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (.+-.)-.alpha.-Methyl-4-(2-methylpropyl)benzeneacetic acid
CN (.+-.)-2-(p-Isobutylphenyl)propionic acid
CN (.+-.)-Ibuprofen
CN (.+-.)-Ibuprophen
CN (4-Isobutylphenyl)-.alpha.-methylacetic acid
CN (RS)-Ibuprofen
CN (S)-4-Isobutyl-.alpha.-methylphenylacetic acid
CN .alpha.-(4-Isobutylphenyl)propionic acid
CN .alpha.-Methyl-4-(2-methylpropyl)benzeneacetic acid
CN 2-(4'-Isobutylphenyl)propionic acid
CN 2-(4-Isobutylphenyl)propanoic acid
CN 2-(p-Isobutylphenyl)propionic acid
CN 4-Isobutyl-.alpha.-methylphenylacetic acid
CN 4-Isobutylhydratropic acid
CN Act 3
CN Adex 200
CN Advil
CN Alaxan
CN Algofen
CN Am-Fam 400
CN Anafen
CN Anco
CN Andran
CN Anflagen
CN Antarene
CN Antiflam
CN Apo-Ibuprofen
CN Apsifen
CN Artofen
CN Artril
CN Atril 300
CN Balkaprofen
CN Betaprofen
CN Bloom
CN Bluton
CN Brofen
CN Brufanic
CN Brufen
CN Brufen 400
CN Brufen Retard
CN Bruflam
CN Brufort
CN Buburone
CN Burana

CN Butacortelone
CN Carol
CN Cobo
CN Codral Period Pain
CN Combiflam
CN Dibufen
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
FS 3D CONCORD
DR 58560-75-1, 139466-08-3
MF C13 H18 O2
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DIPPR*, DRUGPAT, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

5852 REFERENCES IN FILE CA (1962 TO DATE)
174 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5866 REFERENCES IN FILE CAPLUS (1962 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:65749

REFERENCE 2: 138:61373

REFERENCE 3: 138:61369

REFERENCE 4: 138:61365

REFERENCE 5: 138:61315

REFERENCE 6: 138:61149

REFERENCE 7: 138:60879

REFERENCE 8: 138:55713

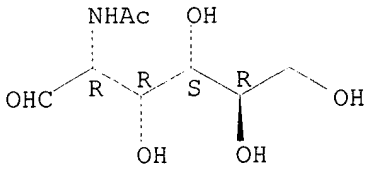
REFERENCE 9: 138:44736

REFERENCE 10: 138:44722

L70 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **7512-17-6** REGISTRY

CN D-Glucose, 2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-Glucose, 2-acetamido-2-deoxy- (8CI)
OTHER NAMES:
CN 2-Acetamido-2-deoxy-D-glucose
CN 2-Acetamido-2-deoxyglucose
CN 2-Acetamido-D-glucose
CN 2-Acetylamino-2-deoxy-D-glucose
CN Acetylglucosamine
CN D-N-Acetylglucosamine
CN Marine Sweet
CN N-Acetyl-2-amino-2-deoxy-D-glucose
CN N-Acetyl-2-amino-2-deoxyglucose
CN N-Acetyl-D-glucosamine
CN N-Acetylglucosamine
FS STEREOSEARCH
DR 7132-76-5, 134-61-2, 173382-53-1, 98632-70-3
MF C8 H15 N O6
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PIRA, PROMT, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

4975 REFERENCES IN FILE CA (1962 TO DATE)
372 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4980 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:61045

REFERENCE 2: 138:51620

REFERENCE 3: 138:51537

REFERENCE 4: 138:44821

REFERENCE 5: 138:37402

REFERENCE 6: 138:36689

REFERENCE 7: 138:34830

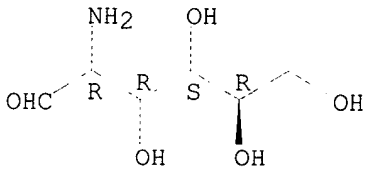
REFERENCE 8: 138:23767

REFERENCE 9: 138:21926

REFERENCE 10: 138:21284

L70 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **3416-24-8** REGISTRY
CN D-Glucose, 2-amino-2-deoxy- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Amino-2-deoxy-D-glucopyranose
CN 2-Amino-2-deoxy-D-glucose
CN 2-Amino-2-deoxyglucose
CN 2-Deoxy-2-amino-D-glucose
CN 2-Deoxy-2-aminoglucose
CN Chitosamine
CN D-Glucosamine
CN Glucosamine
FS STEREOSEARCH
DR 58-87-7, 58267-75-7, 2351-15-7
MF C6 H13 N O5
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHARMASEARCH, PIRA, PROMT, RTECS*, SYNTHLINE, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

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312 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4733 REFERENCES IN FILE CAPLUS (1962 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:61295

REFERENCE 2: 138:61290

REFERENCE 3: 138:52546

REFERENCE 4: 138:49392

REFERENCE 5: 138:44821

REFERENCE 6: 138:44738

REFERENCE 7: 138:44521

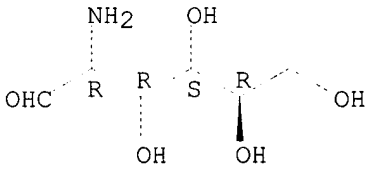
REFERENCE 8: 138:44100

REFERENCE 9: 138:37189

REFERENCE 10: 138:35679

L70 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **66-84-2** REGISTRY
CN D-Glucose, 2-amino-2-deoxy-, hydrochloride (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Amino-2-deoxy-D-glucose hydrochloride
CN 2-Deoxy-2-amino-D-glucose hydrochloride
CN Chitosamine hydrochloride
CN Cosamin
CN D-(+)-Glucosamine hydrochloride
CN D-Glucosamine chloride
CN D-Glucosamine hydrochloride
CN Glucosamine hydrochloride
FS STEREOSEARCH
DR 2002-25-7, 3615-52-9, 66573-21-5, 151799-45-0, 34673-29-5, 214046-22-7
MF C6 H13 N O5 . Cl H
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, IFICDB, IFIPAT, IFIUDB, IPA, PIRA, PROMT, RTECS*, TOXCENTER, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (3416-24-8)

Absolute stereochemistry. Rotation (+).




● HCl

769 REFERENCES IN FILE CA (1962 TO DATE)
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
772 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:61045

REFERENCE 2: 138:51537

REFERENCE 3: 138:49392

REFERENCE 4: 138:39499

REFERENCE 5: 138:14820

REFERENCE 6: 138:11371

REFERENCE 7: 138:8378

REFERENCE 8: 138:8364

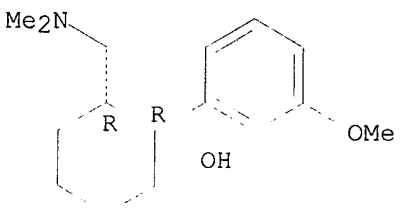
REFERENCE 9: 138:4803

REFERENCE 10: 137:386237

=> d l71 ide can

L71 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN **27203-92-5** REGISTRY
CN Cyclohexanol, 2-[(dimethylamino)methyl]-1-(3-methoxyphenyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclohexanol, 2-[(dimethylamino)methyl]-1-(3-methoxyphenyl)-, cis-(.+-.)-
CN Cyclohexanol, 2-[(dimethylamino)methyl]-1-(m-methoxyphenyl)- (8CI)
OTHER NAMES:
CN (.+-.)-Tramadol
CN cis-Tramadol
CN Racemic tramadol
CN Tramadol
FS STEREOSEARCH
DR 113683-92-4, 73806-46-9
MF C16 H25 N O2
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, DDFU, DIOGENES, DRUGU, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Relative stereochemistry.




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

532 REFERENCES IN FILE CA (1962 TO DATE)
18 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
537 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:61448

REFERENCE 2: 138:49342

REFERENCE 3: 138:33355

REFERENCE 4: 138:33351

REFERENCE 5: 138:32766

REFERENCE 6: 138:19392

REFERENCE 7: 137:389167

REFERENCE 8: 137:375269

REFERENCE 9: 137:363089

REFERENCE 10: 137:363086

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 11:02:03 ON 27 JAN 2003


FILE COVERS 1907 - 27 Jan 2003 VOL 138 ISS 5
FILE LAST UPDATED: 26 Jan 2003 (20030126/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l68 all hitstr tot

L68 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN **2002:256052** HCAPLUS
DN **136:284456**
TI **Analgesic** and **glucosamine** compositions
IN **Raffa, Robert; Cowan, Alan; Tallarida, Ronald**
PA Temple University of the Commonwealth System of Higher Education, USA
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-70
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2002026239 | A1 | 20020404 | WO 2001-US29606 | 20010921 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | | |
|---|---|---|---|---|---|
| | AU 2001092929 | A5 | 20020408 | AU 2001-92929 | 20010921 |
| | US 2002058642 | A1 | 20020516 | US 2001-964178 | 20010925 |
| PRAI | US 2000-235405P | P | 20000926 | | |
| | WO 2001-US29606 | W | 20010921 | | |

AB This invention relates to a compn. a **glucosamine** material and an **analgesic** compd. such as a **nonsteroidal** anti-**inflammatory** drug (**NSAID**) and/or an opioid **analgesic** and its use for treatment of pain in pharmaceutical or veterinary applications. When the components are administered within certain ratios, the **analgesic** efficacy of the compn. is super-additive (synergistic) relative to the **analgesic** efficacy of the **analgesic** compd. alone. Solns. of **glucosamine** with **ibuprofen** or **ketoprofen** were given.

ST **analgesic NSAID glucosamine** compn

IT **Analgesics**
**Antiarthritics**
**Antihistamines**
**Bronchodilators**
**Decongestants**
**Muscle relaxants**
(**analgesic** and **glucosamine** compns.)

IT **Anti-inflammatory agents**
(**nonsteroidal**; **analgesic** and **glucosamine** compns.)

IT Drug interactions
(synergistic; **analgesic** and **glucosamine** compns.)

IT **66-84-2, Glucosamine** hydrochloride 103-90-2, Acetaminophen **3416-24-8, Glucosamine 7512-17-6**, N-**Acetylglucosamine** 15307-86-5, Diclofenac **15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 27203-92-5**, Tramadol **29031-19-4, Glucosamine** sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**analgesic** and **glucosamine** compns.)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

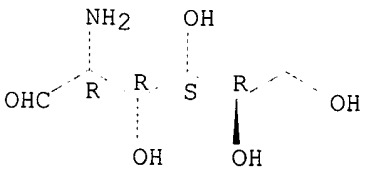
(1) Armitage; US 4501727 A 1985 HCAPLUS

IT **66-84-2, Glucosamine** hydrochloride **3416-24-8, Glucosamine 7512-17-6**, N-**Acetylglucosamine 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 27203-92-5**, Tramadol **29031-19-4, Glucosamine** sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**analgesic** and **glucosamine** compns.)

RN 66-84-2 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, hydrochloride (8CI, 9CI) (CA INDEX NAME)

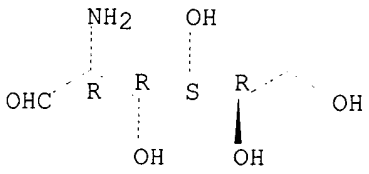
Absolute stereochemistry. Rotation (+).




● HCl

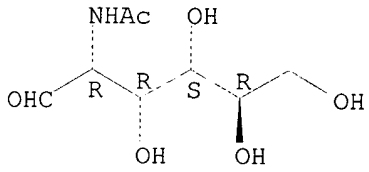
RN 3416-24-8 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

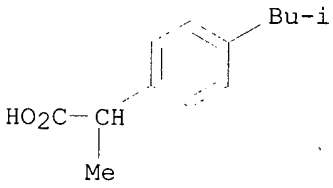


RN 7512-17-6 HCAPLUS
CN D-Glucose, 2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)

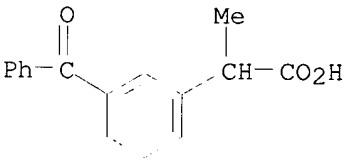
Absolute stereochemistry.



RN 15687-27-1 HCAPLUS
CN Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)- (9CI) (CA INDEX NAME)

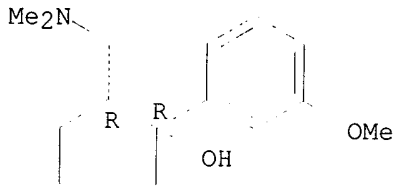


RN 22071-15-4 HCAPLUS
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl- (9CI) (CA INDEX NAME)



RN 27203-92-5 HCAPLUS
CN Cyclohexanol, 2-[(dimethylamino)methyl]-1-(3-methoxyphenyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

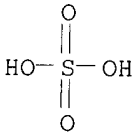
Relative stereochemistry.



RN 29031-19-4 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

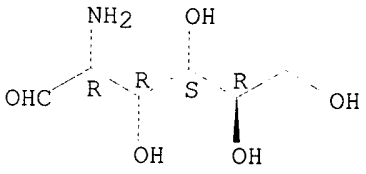
CRN 7664-93-9
CMF H2 O4 S



CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



L68 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:672575 HCAPLUS
DN 131:291311
TI Pharmaceutical preparations containing hydrosoluble **ketoprofen** salts
IN Giorgetti, Paolo Luca Maria
PA Errekappa Euroterapici S.p.A., Italy
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-40
ICS A61K031-70; A61K031-19; C07H005-06; C07D207-16; C07C051-41; C07C059-84
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9952528 | A1 | 19991021 | WO 1999-IB626 | 19990409 |

W: CA, CN, JP, KR, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

| | | | | | |
|---|---|---|---|---|---|
| | CH 692939 | A | 20021231 | CH 1998-843 | 19980411 |
| | EP 1024808 | A1 | 20000809 | EP 1999-910606 | 19990409 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI | | | | |
| | JP 2002510336 | T2 | 20020402 | JP 1999-551422 | 19990409 |
| | US 6291527 | B1 | 20010918 | US 1999-445672 | 19991210 |
| PRAI | CH 1998-843 | A | 19980411 | | |
| | CH 1999-618 | A | 19990331 | | |
| | WO 1999-IB626 | W | 19990409 | | |

AB The new pharmaceutical prepns. contain hydrosol. salts obtained through a reaction between **ketoprofen** and **glucosamine** and/or Proline and/or Hydroxyproline from 0.01 to 30 % of the mass. Such prepns. are useful for anti-inflammatory and **analgesic** treatment of joints and mucous membranes. Thus, an i.m. injection (quantities for 1 unit) consisted of **ketoprofen glucosamine** salt 170 equiv. to **ketoprofen** acid 100 mg, excipients such as benzyl alc. 90, NaCl 27 mg and water for injectable prepns. up to 3 mL.

ST **ketoprofen** salt pharmaceutical hydrosoluble

IT Drug delivery systems
(capsules, controlled-release; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(capsules; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(chewing gums; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(foams; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(gels; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(granules, pharmaceutical; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(granules, sustained release; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(injections, i.m.; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(injections, i.v.; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(injections; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(lotions; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(ointments, creams; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

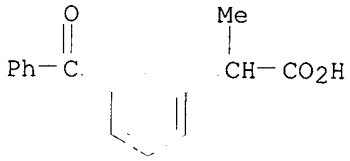
IT Drug delivery systems
(ointments; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT Drug delivery systems
(oral; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)

IT **Analgesics**
**Anti-inflammatory agents**
Mouthwashes
(pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(solns., ophthalmic; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(solns.; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(suppositories; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(suspensions, sustained-release; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(suspensions; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(tablets, coated; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(tablets; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(topical; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(transdermal; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT Drug delivery systems
(vaginal; pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT **246858-10-6**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(9099000 pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
IT **22071-15-4D, Ketoprofen,** salts 246858-11-7
246858-12-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Green Cross Corporation; JP 63093718 A 1988 HCAPLUS
(2) Hoechst Celanese Corporation; WO 9412451 A 1994 HCAPLUS
(3) Laboratorios Menarini; WO 9616016 A 1996 HCAPLUS
(4) The Procter & Gamble Company; WO 9507079 A 1995 HCAPLUS
(5) Veronesi; US 4748174 A 1988 HCAPLUS
IT **246858-10-6**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(9099000 pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
RN 246858-10-6 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy-, 3-benzoyl-.alpha.-methylbenzeneacetate (salt) (9CI) (CA INDEX NAME)

CM 1

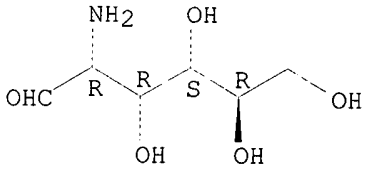
CRN 22071-15-4
CMF C16 H14 O3



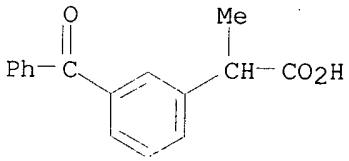
CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



IT **22071-15-4D, Ketoprofen,** salts
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical prepns. contg. hydrosol. **ketoprofen** salts)
RN 22071-15-4 HCAPLUS
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl- (9CI) (CA INDEX NAME)



L68 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:551706 HCAPLUS
DN 131:161659
TI Pharmaceutical preparations containing (R)-2-(3-Benzoylphenyl)propionic acid salts for the treatment of neutrophil-dependent diseases and phlogistic processes
IN Bertini, Riccardo; Bizzarri, Cinzia; Brandolini, Laura; Melillo, Gabriella; Caselli, Gianfranco; Clavenna, Gaetano
PA Dompe S.p.A., Italy
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K031-19
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | EP 935961 | A2 | 19990818 | EP 1999-101322 | 19990125 |
| | EP 935961 | A3 | 20000823 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

| | | | | | |
|---|---|---|---|---|---|
| | IT 1298214 | B1 | 19991220 | IT 1998-MI146 | 19980128 |
| | US 6069172 | A | 20000530 | US 1999-237901 | 19990127 |
| PRAI | IT 1998-MI146 | A | 19980128 | | |

AB A new use of the enantiomer (R)-**ketoprofen** and of its salts with suitable org. and inorg. bases in the therapy of neutrophil-dependent diseases and phlogistic processes is described as well as pharmaceutical prepns. contg. such compds. and useful for oral, parenteral or topical administration. Specific inhibitory effects of lysine salts of (R)- and (S)-**ketoprofen** on interleukin-8- stimulated chemotactic migration are shown. The effects of these drugs were not limited to interleukin-8-stimulated chemotaxis, but were also displayed, surprisingly, on the processes induced by other physiol and non-physiol. stimulant acting, although in different ways, through variations in intracellular Ca++ concn. An injection soln. contained (R)-**ketoprofen** lysine salt 80, citric acid 2.5, sodium hydrate 1.5 mg, and water 1 mL.

ST pharmaceutical enantiomer **ketoprofen** salt neutrophil disease; injection pharmaceutical lysine **ketoprofen**

IT Neutrophil
(-dependent diseases; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Reperfusion
(damage from; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(emulsions; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Lung, disease
(fibrosis, idiopathic; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(foams; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Kidney, disease
(glomerulonephritis; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(granules; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(injections; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(ointments, creams; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(ointments; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(parenterals; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Psoriasis

(pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(powders; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Breathing (animal)
(respiratory failure, acute; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(solns.; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(sprays; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(suppositories; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(tablets; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT Drug delivery systems
(topical; pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

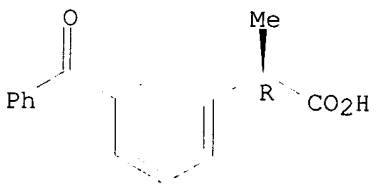
IT **56105-81-8D**, salts 167300-65-4 167300-66-5 167300-67-6 167300-68-7 167300-69-8 167300-70-1 237742-71-1 237742-72-2 237742-73-3 237742-74-4 237742-75-5 237742-76-6 237742-77-7 237742-78-8 237742-79-9 237742-80-2 237742-81-3 **237742-82-4** 237742-83-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

IT **56105-81-8D**, salts **237742-82-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical prepns. contg. enantiomer (R)-**ketoprofen** and of its salts for treatment of neutrophil-dependent diseases and phlogistic processes)

RN 56105-81-8 HCAPLUS

CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl-, (.alpha.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

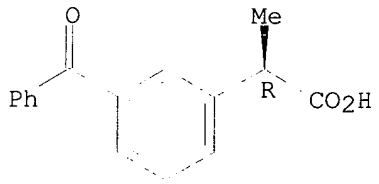


RN 237742-82-4 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy-, (.alpha.R)-3-benzoyl-.alpha.-methylbenzeneacetate (9CI) (CA INDEX NAME)

CM 1

CRN 56105-81-8
CMF C16 H14 O3

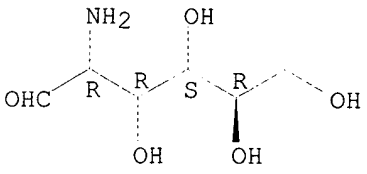
Absolute stereochemistry. Rotation (-).




CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).




L68 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN **1997:224073** HCAPLUS
DN **126:216664**
TI Pharmaceutical compositions containing **analgesics** and **antihistamines** and methods for treating respiratory disorders
IN Cramer, Ronald Dean; Mitra, Sekhar; Riker, Donald Kay
PA Procter and Gamble Company, USA
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K045-06
ICS A61K031-40; A61K031-19
ICI A61K031-40, A61K031-19; A61K031-40, A61K031-19, A61K031-135; A61K031-40, A61K031-19, A61K031-485
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9704808 | A1 | 19970213 | WO 1996-US12249 | 19960725 |

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,

IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

| | | | | | |
|---|---|---|---|---|---|
| | CA 2227958 | AA | 19970213 | CA 1996-2227958 | 19960725 |
| | AU 9665991 | A1 | 19970226 | AU 1996-65991 | 19960725 |
| | EP 841947 | A1 | 19980520 | EP 1996-925495 | 19960725 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| | JP 11510168 | T2 | 19990907 | JP 1996-507747 | 19960725 |
| | ZA 9606385 | A | 19970604 | ZA 1996-6385 | 19960728 |
| PRAI | US 1995-508775 | A | 19950728 | | |
| | US 1996-611528 | A | 19960305 | | |
| | WO 1996-US12249 | W | 19960725 | | |

OS MARPAT 126:216664

AB Compns. and methods for providing improved treatment, management or mitigation of cold cold-like, allergy, sinus and/or flu symptoms by administering a safe and effective amt. of a compn. comprising an **analgesic** agent along with certain pyrrolidine and piperidine ether **antihistaminic** agents. A hard gelatin capsule contained **ibuprofen** 200.00, clemastine fumarate 0.67, pseudoephedrine.HCl 30.00 mg, and lactose q.s. Administration of 1-2 capsules every 4-12 h provide relief from cough, cold, flu and allergic rhinitis symptoms.

ST pharmaceutical **analgesic antihistamine** respiratory disorder; capsule clemastine pseudoephedrine cold flu cough

IT Drug delivery systems
(capsules; pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

IT Respiratory tract
(disease; pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

IT Drug delivery systems
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liqs.; pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

IT Allergy inhibitors
**Analgesics**
**Anti-inflammatory agents**
**Antihistamines**
Antitussives
**Decongestants**
Expectorants
Influenza
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

IT Amino acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(salts; pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

IT Drug delivery systems
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tablets; pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

IT Adrenoceptor agonists
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.-; pharmaceutical compns. contg. **analgesics** and

**antihistamines** for treating respiratory disorders)

IT 56-87-1, Lysine, biological studies 58-08-2, Caffeine, biological studies 58-73-1, Diphenhydramine 59-33-6 59-42-7, Phenylephrine 59-46-1, Procaine 62-49-7, Choline 70-26-8, Ornithine 71-00-1, Histidine, biological studies 74-79-3, Arginine, biological studies 76-57-3, Codeine 77-22-5, Caramiphen 77-23-6, Carbetapentane 79-09-4D, Propanoic acid, derivs., biological studies 83-67-0, Theobromine 86-22-6, Brompheniramine 90-82-4, Pseudoephedrine 91-81-6, Tripelennamine 93-14-1, Glyceryl guaiacolate 100-37-8, 2-Diethylaminoethanol 102-69-2, Tripropylamine 107-15-3, 1,2-Ethanediamine, biological studies 107-43-7, Betaine 108-01-0 110-85-0, Piperazine, biological studies 110-89-4, Piperidine, biological studies 113-92-8 118-23-0, Bromodiphenhydramine 120-73-0, Purine 121-44-8, biological studies 125-29-1, Hydrocodone 125-69-9, Dextromethorphan hydrobromide 125-71-3, Dextromethorphan 125-92-8, Hydrabamine 128-62-1, Noscapine 129-03-3, Cyproheptadine 132-21-8, Dexbrompheniramine 299-42-3, Ephedrine 345-78-8, Pseudoephedrine hydrochloride 466-99-9, Hydromorphone 486-12-4 486-16-8, Carbinoxamine 562-10-7 569-59-5 616-91-1, n-Acetylcysteine 766-09-6, n-Ethylpiperidine 791-35-5, Chlophedianol 2451-01-6, Terpin hydrate **3416-24-8, Glucosamine** 3572-43-8, Bromhexine 3964-81-6, Azatadine 5104-49-4, Flurbiprofen 6284-40-8, Methylglucamine 7723-51-5 12125-02-9, Ammonium chloride, biological studies 14838-15-4, Phenylpropanolamine 14976-57-9, Clemastine fumarate 15307-86-5, Diclofenac **15687-27-1, Ibuprofen** 18053-31-1, Fominoben 18683-91-5, Ambroxol 21256-18-8, Oxaprozin **22071-15-4, Ketoprofen** 22204-53-1, Naproxen 25523-97-1, Dexchlorpheniramine 26159-34-2, Naproxen sodium 29216-28-2, Mequitazine 29679-58-1, Fenoprofen 31793-07-4, Pirprofen 31842-01-0, Indoprofen 33005-95-7, Tiaprofen 34580-13-7, Ketotifen 36330-85-5, Fenbufen 39718-89-3, Alminoprofen 40198-53-6, Tioxaprofen 40828-46-4, Suprofen 50679-08-8, Terfenadine 51234-28-7, Benoxaprofen 52549-17-4, Pranoprofen 53716-49-7, Carprofen 53882-12-5, Lodoxamide 55843-86-2, Miroprofen 58581-89-8, Azelastine 60607-34-3, Oxatomide 64294-95-7, Setastine 68844-77-9, Astemizole 76201-68-8 79516-68-0, Levocabastine 79712-55-3, Tazifylline 79794-75-5, Loratidine 83881-51-0, Cetirizine 86181-42-2, Temelastine 87848-99-5, Acrivastine 90729-43-4, Ebastine 96170-72-8 113403-10-4 115609-60-4, AHR 11325 162929-63-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

IT **3416-24-8, Glucosamine 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen**

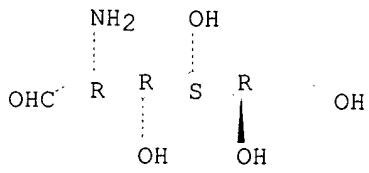
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. contg. **analgesics** and **antihistamines** for treating respiratory disorders)

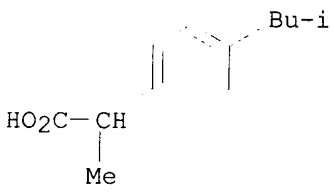
RN 3416-24-8 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy- (8CI, 9CI) (CA INDEX NAME)

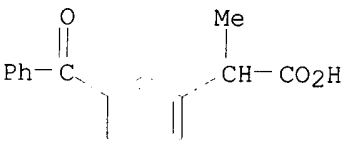
Absolute stereochemistry. Rotation (+).



RN 15687-27-1 HCAPLUS
CN Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)- (9CI) (CA INDEX NAME)




RN 22071-15-4 HCAPLUS
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl- (9CI) (CA INDEX NAME)




L68 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN **1995:546946** HCAPLUS
DN **122:274115**
TI Compositions containing an amino acid salt of a propionic acid **nonsteroidal antiinflammatory** agent and at least one of a **decongestant**, an expectorant, an **antihistamine**, and an antitussive
IN Mitra, Sekhar
PA Procter and Gamble Co., USA
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K045-06
ICS A61K031-19; A61K031-445; A61K031-485
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9507103 | A1 | 19950316 | WO 1994-US9581 | 19940824 |
| | W: AU, BR, CA, CN, JP, PL, RU | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2170488 | AA | 19950316 | CA 1994-2170488 | 19940824 |
| | AU 9476040 | A1 | 19950327 | AU 1994-76040 | 19940824 |
| | EP 719156 | A1 | 19960703 | EP 1994-926020 | 19940824 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | CN 1130354 | A | 19960904 | CN 1994-193312 | 19940824 |
| | BR 9407414 | A | 19961112 | BR 1994-7414 | 19940824 |
| | JP 09502201 | T2 | 19970304 | JP 1994-508695 | 19940824 |
| PRAI | US 1993-116927 | | 19930907 | | |
| | WO 1994-US9581 | | 19940824 | | |

AB A method for providing improved treatment, management, or mitigation of cold, coldlike, and/or flu symptoms comprises administering a safe and effective amt. of a compn. comprising certain amino acid salts of propionic acid **nonsteroidal antiinflammatory** agents

along with .gtoreq.1 of a **decongestant**, expectorant, **antihistamine**, and antitussive. Thus, a hard gelatin capsule contained naproxen lysinate 200, pseudoephedrine-HCl 30, astemizole 5, and glyceryl guaiacolate 100 mg.

ST common cold **nonsteroidal antiinflammatory decongestant**; expectorant **nonsteroidal antiinflammatory** common cold; **antihistaminic nonsteroidal antiinflammatory** common cold; antitussive **nonsteroidal antiinflammatory** common cold

IT **Antihistaminics**
Antitussives
Common cold
**Decongestants**
Expectorants
Influenza
(common cold treatment with amino acid salt of propionic acid **nonsteroidal antiinflammatory** agent and **decongestant**, expectorant, **antihistamine**, and/or antitussive)

IT Amino acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(salts with **nonsteroidal antiinflammatory** drugs; common cold treatment with amino acid salt of propionic acid **nonsteroidal antiinflammatory** agent and **decongestant**, expectorant, **antihistamine**, and/or antitussive)

IT **Inflammation inhibitors**
(**nonsteroidal**, amino acid salts; common cold treatment with amino acid salt of propionic acid **nonsteroidal antiinflammatory** agent and **decongestant**, expectorant, **antihistamine**, and/or antitussive)

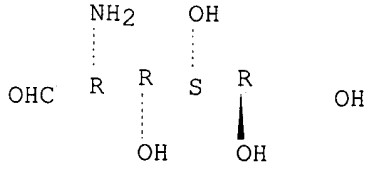
IT 56-87-1D, L-Lysine, compds. with **nonsteroidal antiinflammatory** drugs 58-08-2D, Caffeine, compds. with **nonsteroidal antiinflammatory** drugs 58-73-1, Diphenhydramine 59-33-6 59-42-7, Phenylephrine 59-46-1D, Procaine, compds. with **nonsteroidal antiinflammatory** drugs 62-49-7D, Choline, compds. with **nonsteroidal antiinflammatory** drugs 70-26-8D, L-Ornithine, compds. with **nonsteroidal antiinflammatory** drugs 71-00-1D, L-Histidine, compds. with **nonsteroidal antiinflammatory** drugs 74-79-3D, L-Arginine, compds. with **nonsteroidal antiinflammatory** drugs 76-57-3, Codeine 77-22-5, Caramiphen 77-23-6, Carbetapentane 79-09-4D, Propionic acid, derivs., amino acid salts 83-67-0D, Theobromine, compds. with **nonsteroidal antiinflammatory** drugs 86-22-6, Brompheniramine 90-82-4, Pseudoephedrine 91-81-6, Tripelennamine 93-14-1, Glyceryl guaiacolate 100-37-8D, 2-Diethylaminoethanol, compds. with **nonsteroidal antiinflammatory** drugs 102-69-2D, Tripropylamine, compds. with **nonsteroidal antiinflammatory** drugs 107-15-3D, 1,2-Ethanediamine, compds. with **nonsteroidal antiinflammatory** drugs 107-43-7D, Betaine, compds. with **nonsteroidal antiinflammatory** drugs 108-01-0D, compds. with **nonsteroidal antiinflammatory** drugs 110-85-0D, Piperazine, compds. with **nonsteroidal antiinflammatory** drugs 110-89-4D, Piperidine, compds. with **nonsteroidal antiinflammatory** drugs 113-92-8, Chlorpheniramine maleate 118-23-0, Bromodiphenhydramine 120-73-0D, Purine, compds. with **nonsteroidal antiinflammatory** drugs 121-44-8D, compds. with **nonsteroidal antiinflammatory** drugs 125-29-1, Hydrocodone 125-69-9, Dextromethorphan hydrobromide 125-71-3, Dextromethorphan 125-92-8D, Hydrabamine, compds. with

**nonsteroidal antiinflammatory** drugs 128-62-1, Noscapine 129-03-3, Cyproheptadine 132-21-8, Dexbrompheniramine 299-42-3, Ephedrine 345-78-8, Pseudoephedrine hydrochloride 466-99-9, Hydromorphone 486-12-4, Triprolidine 486-16-8, Carbinoxamine 562-10-7 569-59-5 616-91-1, N-Acetylcysteine 766-09-6D, N-Ethylpiperidine, compds. with **nonsteroidal antiinflammatory** drugs 791-35-5, Chlophedianol 2451-01-6, Terpin hydrate **3416-24-8D**, **Glucosamine**, compds. with **nonsteroidal antiinflammatory** drugs 3572-43-8, Bromhexine 3964-81-6, Azatadine 5104-49-4D, Flurbiprofen, amino acid salts 6284-40-8D, Methylglucamine, compds. with **nonsteroidal antiinflammatory** drugs 12125-02-9, Ammonium chloride, biological studies 14838-15-4, Phenylpropanolamine **15687-27-1D**, **Ibuprofen**, amino acid salts 18053-31-1, Fominoben 18683-91-5, Ambroxol 21256-18-8D, Oxaprozin, amino acid salts **22071-15-4D**, **Ketoprofen**, amino acid salts 22204-53-1D, Naproxen, amino acid salts 25523-97-1, Dexchlorpheniramine 29216-28-2, Mequitazine 31793-07-4D, Pirprofen, amino acid salts 31842-01-0D, Indoprofen, amino acid salts 31879-05-7D, Fenoprofen, amino acid salts 33005-95-7D, Tiaprofen, amino acid salts 34580-13-7, Ketotifen 36330-85-5D, Fenbufen, amino acid salts 39718-89-3D, Alminoprofen, amino acid salts 40198-53-6D, Tioxaprofen, amino acid salts 40828-46-4D, Suprofen, amino acid salts 50679-08-8, Terfenadine 51234-28-7D, Benoxaprofen, amino acid salts 52549-17-4D, Pranoprofen, amino acid salts 53716-49-7D, Carprofen, amino acid salts 53882-12-5, Lodoxamide 55843-86-2D, Miroprofen, amino acid salts 57351-43-6 58581-89-8, Azelastine 60607-34-3, Oxatomide 64294-95-7, Setastine 68844-77-9, Astemizole 79516-68-0, Levocabastine 79712-55-3, Tazifylline 79794-75-5, Loratadine 83881-51-0, Cetirizine 86181-42-2, Temelastine 87848-99-5, Acrivastine 90729-43-4, Ebastine 113403-10-4 115609-60-4, AHR-11325 136013-66-6 158721-32-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(common cold treatment with amino acid salt of propionic acid **nonsteroidal antiinflammatory** agent and **decongestant**, expectorant, **antihistamine**, and/or antitussive)

IT **3416-24-8D**, **Glucosamine**, compds. with **nonsteroidal antiinflammatory** drugs **15687-27-1D**, **Ibuprofen**, amino acid salts **22071-15-4D**, **Ketoprofen**, amino acid salts
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(common cold treatment with amino acid salt of propionic acid **nonsteroidal antiinflammatory** agent and **decongestant**, expectorant, **antihistamine**, and/or antitussive)

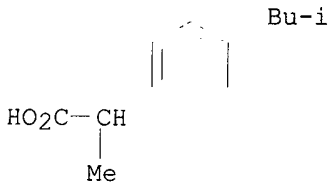
RN 3416-24-8 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

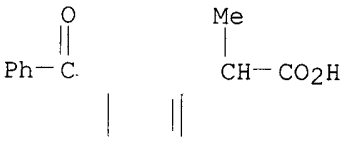


RN 15687-27-1 HCAPLUS

CN Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)- (9CI) (CA INDEX NAME)



RN 22071-15-4 HCAPLUS
CN Benzeneacetic acid, 3-benzoyl-.alpha.-methyl- (9CI) (CA INDEX NAME)



L68 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN **1992:537660** HCAPLUS
DN **117:137660**
TI S(+)-phenylalkanoic acids and aminosugar complexes
IN Paradies, Henrich Hasko
PA MEDICE Chem.-Pharm. Fabrik Puetter GmbH und Co. KG, Germany
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LA German
IC ICM C07C057-30
ICS A61K031-205; C07H005-06
CC 63-5 (Pharmaceuticals)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | EP 486046 | A2 | 19920520 | EP 1991-119523 | 19911115 |
| | EP 486046 | A3 | 19921209 | | |
| | EP 486046 | B1 | 19960501 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| | HU 59692 | A2 | 19920629 | HU 1991-3572 | 19911114 |
| | CA 2055681 | AA | 19920516 | CA 1991-2055681 | 19911115 |
| | DE 4137683 | A1 | 19920521 | DE 1991-4137683 | 19911115 |
| | AU 9187904 | A1 | 19920521 | AU 1991-87904 | 19911115 |
| | AU 642309 | B2 | 19931014 | | |
| | CN 1061415 | A | 19920527 | CN 1991-110740 | 19911115 |
| | ZA 9109075 | A | 19920826 | ZA 1991-9075 | 19911115 |
| | JP 06184003 | A2 | 19940705 | JP 1991-354100 | 19911115 |
| | JP 2542765 | B2 | 19961009 | | |
| | AT 137486 | E | 19960515 | AT 1991-119523 | 19911115 |
| | BR 9104997 | A | 19920623 | BR 1991-4997 | 19911118 |
| | US 5604206 | A | 19970218 | US 1994-328722 | 19940218 |
| PRAI | DE 1990-4036460 | | 19901115 | | |
| | US 1991-792479 | | 19911115 | | |

OS MARPAT 117:137660
AB H bridge 1:1 complexes of S-(+)-phenylalkanoic acid drugs with amino sugars are prepd. The complexes have higher bioavailability than the free

acids. A soln. of 206.27 mg S-(+)-**ibuprofen** and 236.72 mg 1-amino-1-deoxy-D-glucitol in 6 mL water was ultrasonicated at 45.degree., to give a 1:1 complex.

ST phenylalkanoate amino sugar complex drug

IT Drug bioavailability
(of S-(+)-phenylalkanoic acid complexes with amino sugars)

IT Carbohydrates and Sugars, compounds
RL: BIOL (Biological study)
(aminodeoxy, conjugates, with S-(+)-phenylalkanoic acids, for high-bioavailability pharmaceuticals)

IT 488-43-7D, Glucamine, complexes with S-(+)-phenylalkanoic acids 532-19-4D, complexes with S-(+)-phenylalkanoic acids 579-32-8D, complexes with S-(+)-phenylalkanoic acids 2494-50-0D, complexes with S-(+)-phenylalkanoic acids **3416-24-8D**, complexes with S-(+)-phenylalkanoic acids 5840-75-5D, complexes with S-(+)-phenylalkanoic acids 6284-40-8D, complexes with S-(+)-phenylalkanoic acids 6790-34-7D, complexes with S-(+)-phenylalkanoic acids 7535-00-4D, complexes with S-(+)-phenylalkanoic acids 14216-22-9D, complexes with S-(+)-phenylalkanoic acids 14307-02-9D, complexes with S-(+)-phenylalkanoic acids 14307-09-6D, complexes with S-(+)-phenylalkanoic acids 22204-53-1D, S-(+)-Naproxen, complexes with amino sugars 26315-48-0D, complexes with S-(+)-phenylalkanoic acids 27799-64-0D, Allosamine, complexes with S-(+)-phenylalkanoic acids 51108-70-4D, Ribamine, complexes with S-(+)-phenylalkanoic acids **51146-56-6D**, S-(+)-**Ibuprofen**, complexes with amino sugars 83058-22-4D, complexes with S-(+)-phenylalkanoic acids
RL: BIOL (Biological study)
(high-bioavailability pharmaceuticals)

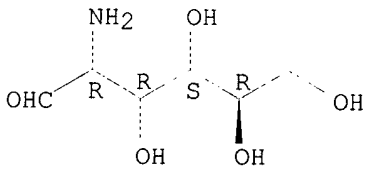
IT 134309-33-4P 143381-45-7P
RL: PREP (Preparation)
(prepn. of, as high-bioavailability pharmaceutical)

IT **3416-24-8D**, complexes with S-(+)-phenylalkanoic acids **51146-56-6D**, S-(+)-**Ibuprofen**, complexes with amino sugars
RL: BIOL (Biological study)
(high-bioavailability pharmaceuticals)

RN 3416-24-8 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy- (8CI, 9CI) (CA INDEX NAME)

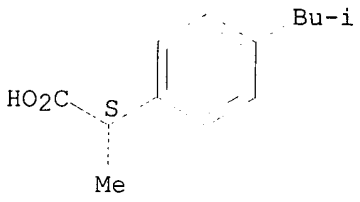
Absolute stereochemistry. Rotation (+).




RN 51146-56-6 HCAPLUS

CN Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).




=> fil reg
FILE 'REGISTRY' ENTERED AT 11:03:00 ON 27 JAN 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.


Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 24 JAN 2003 HIGHEST RN 481628-73-3
DICTIONARY FILE UPDATES: 24 JAN 2003 HIGHEST RN 481628-73-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

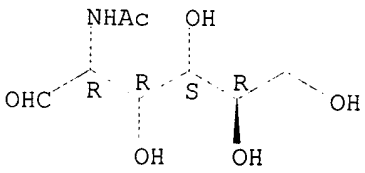
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s l10,l20 not l69
L72 10 (L10 OR L20) NOT L69

=> d ide can tot

L72 ANSWER 1 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 457602-76-5 REGISTRY
CN D-Glucose, 2-(acetylamino)-2-deoxy-, hydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C8 H15 N O6 . Cl H**
SR CA
LC STN Files: CA, CAPLUS
CRN (7512-17-6)

Absolute stereochemistry.




● HCl

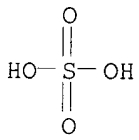
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:222087

L72 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 127831-02-1 REGISTRY
CN D-Glucose, 2-amino-2-deoxy-, hydrogen sulfate (ester) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C6 H13 N O5 . x H2 O4 S**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

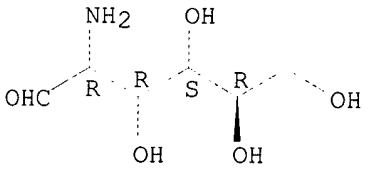
CRN 7664-93-9
CMF H2 O4 S



CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

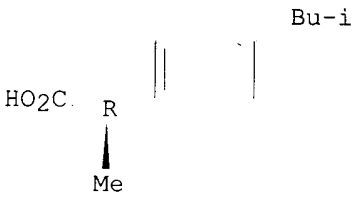
REFERENCE 1: 136:199305

REFERENCE 2: 113:29136

L72 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 51146-57-7 REGISTRY
CN **Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)-, (.alpha.R)-(9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)-, (R)-**
OTHER NAMES:
CN **(-)-.alpha.-Methyl-4-(2-methylpropyl)benzeneacetic acid**
CN **(-)-Ibuprofen**
CN (-)-Ibuprophen
CN **(R)-(-)-Ibuprofen**
CN (R)-2-(4-Isobutylphenyl)propanoic acid

CN **(R)-Ibuprofen**
CN 12: PN: WO02073205 FIGURE: 7 claimed sequence
CN **l-Ibuprofen**
CN R-(-)-p-Isobutylhydratropic acid
FS STEREOSEARCH
MF **C13 H18 O2**
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CEN, CHEMINFORMRX, CIN, CSCHEM, IPA, PROMT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

529 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
529 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:65749

REFERENCE 2: 137:369721

REFERENCE 3: 137:242132

REFERENCE 4: 137:216777

REFERENCE 5: 137:195592

REFERENCE 6: 137:191189

REFERENCE 7: 137:150277

REFERENCE 8: 137:149476

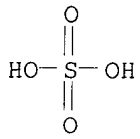
REFERENCE 9: 137:114625

REFERENCE 10: 137:83751

L72 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 33508-19-9 REGISTRY
CN D-Glucose, 2-amino-2-deoxy-, sulfate (1:1) (salt) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C6 H13 N O5 . H2 O4 S**

CM 1

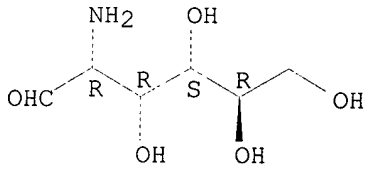
CRN 7664-93-9
CMF H2 O4 S



CM 2

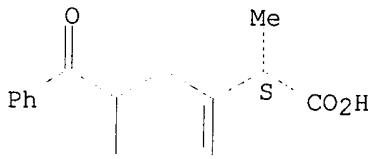
CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



L72 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 22161-81-5 REGISTRY
CN **Benzeneacetic acid, 3-benzoyl-.alpha.-methyl-, (.alpha.S)- (9CI)**
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Benzeneacetic acid, 3-benzoyl-.alpha.-methyl-, (S)-**
CN Hydratropic acid, m-benzoyl-, (+)- (8CI)
OTHER NAMES:
CN (+)-(S)-m-Benzoylhydratropic acid
CN (+)-2-(3-Benzoylphenyl)propionic acid
CN **(+)-3-Benzoyl-.alpha.-methylbenzeneacetic acid**
CN (+)-3-Benzoylhydratropic acid
CN **(+)-Ketoprofen**
CN (2S)-2-(3-Benzoylphenyl)propionic acid
CN (S)-(+)-2-(3-Benzoylphenyl)propionic acid
CN (S)-2-(3-Benzoylphenyl)propionic acid
CN **(S)-Ketoprofen**
CN **Dexketoprofen**
CN **S(+)-Ketoprofen**
FS STEREOSEARCH
MF **C16 H14 O3**
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CIN, CSCHEM, DDFU, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, PHAR, PROMT, RTECS*, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry. Rotation (+).




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

382 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
383 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:19408

REFERENCE 2: 138:11225

REFERENCE 3: 137:379776

REFERENCE 4: 137:375140

REFERENCE 5: 137:261988

REFERENCE 6: 137:257005

REFERENCE 7: 137:241443

REFERENCE 8: 137:162942

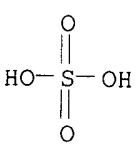
REFERENCE 9: 137:124232

REFERENCE 10: 137:108341

L72 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 14999-43-0 REGISTRY
CN D-Glucose, 2-amino-2-deoxy-, sulfate (2:1) (salt) (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Amino-2-deoxy-.beta.-D-glucose sulfate
CN Tiocondramina
FS STEREOSEARCH
MF **C6 H13 N O5 . 1/2 H2 O4 S**
CI COM
LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

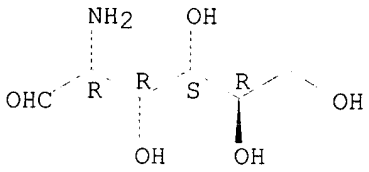
CRN 7664-93-9
CMF H2 O4 S



CM 2

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

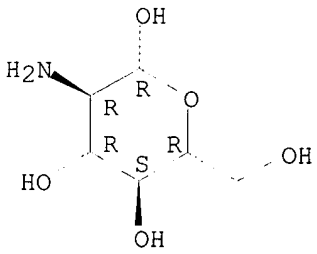
REFERENCE 1: 127:166636

REFERENCE 2: 107:218005

REFERENCE 3: 66:85991

L72 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **14257-69-3** REGISTRY
CN .beta.-D-Glucopyranose, 2-amino-2-deoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glucopyranose, 2-amino-2-deoxy-, .beta.-D- (8CI)
OTHER NAMES:
CN .beta.-D-Glucosamine
CN 2-Amino-2-deoxy-.beta.-D-glucopyranose
FS STEREOSEARCH
DR 28905-10-4
MF C6 H13 N O5
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CHEMINFORMRX, HODOC*, MRCK*, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

50 REFERENCES IN FILE CA (1962 TO DATE)
10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
50 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:201480

REFERENCE 2: 137:168260

REFERENCE 3: 136:216348

REFERENCE 4: 135:235349

REFERENCE 5: 135:149658

REFERENCE 6: 134:39012

REFERENCE 7: 133:59007

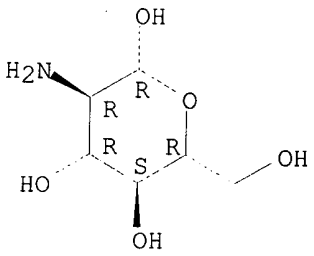
REFERENCE 8: 133:5384

REFERENCE 9: 131:161649

REFERENCE 10: 131:130186

L72 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 14131-63-6 REGISTRY
CN .beta.-D-Glucopyranose, 2-amino-2-deoxy-, hydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **.beta.-Glucosamine hydrochloride**
CN 2-Amino-2-deoxy-.beta.-D-glucopyranose hydrochloride
FS STEREOSEARCH
DR 140400-23-3
MF **C6 H13 N O5 . Cl H**
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, GMELIN*, HODOC*, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)
CRN (14257-69-3)

Absolute stereochemistry.




● HCl

19 REFERENCES IN FILE CA (1962 TO DATE)
19 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 131:254291

REFERENCE 2: 131:228899

REFERENCE 3: 131:152961

REFERENCE 4: 129:224901

REFERENCE 5: 120:190966

REFERENCE 6: 119:96006

REFERENCE 7: 116:194737

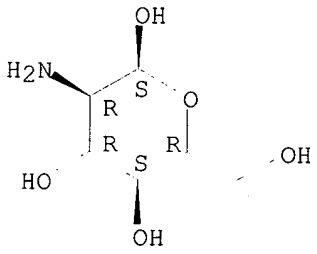
REFERENCE 8: 107:237258

REFERENCE 9: 100:44337

REFERENCE 10: 99:158803

L72 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 14131-62-5 REGISTRY
CN .alpha.-D-Glucopyranose, 2-amino-2-deoxy-, hydrochloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glucopyranose, 2-amino-2-deoxy-, hydrochloride, .alpha.-D- (8CI)
OTHER NAMES:
CN **.alpha.-Glucosamine hydrochloride**
CN 2-Amino-2-deoxy-.alpha.-D-glucopyranose hydrochloride
FS STEREOSEARCH
MF **C6 H13 N O5 . Cl H**
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, CSCHEM, GMELIN*, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)
CRN (6490-70-6)

Absolute stereochemistry.




● HCl

33 REFERENCES IN FILE CA (1962 TO DATE)
33 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:232735

REFERENCE 2: 137:79182

REFERENCE 3: 136:159026

REFERENCE 4: 134:326004

REFERENCE 5: 130:296924

REFERENCE 6: 130:81741

REFERENCE 7: 125:276366

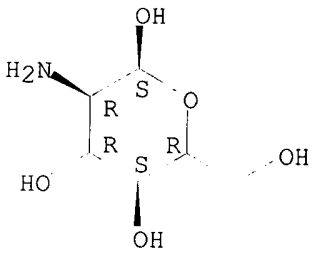
REFERENCE 8: 121:256173

REFERENCE 9: 119:96006

REFERENCE 10: 118:115974

L72 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN **6490-70-6** REGISTRY
CN .alpha.-D-Glucopyranose, 2-amino-2-deoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glucopyranose, 2-amino-2-deoxy-, .alpha.-D- (8CI)
OTHER NAMES:
CN .alpha.-D-Glucosamine
FS STEREOSEARCH
DR 66141-43-3, 28905-11-5
MF C6 H13 N O5
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMINFORMRX, GMELIN*, MRCK*, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

45 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
45 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:189215

REFERENCE 2: 134:340642

REFERENCE 3: 133:252635

REFERENCE 4: 132:206486

REFERENCE 5: 131:199916

REFERENCE 6: 130:81741

REFERENCE 7: 129:276168

REFERENCE 8: 128:321844

REFERENCE 9: 128:57507

REFERENCE 10: 127:95502

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=> d all tot l91

L91 ANSWER 1 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN **2001268073** EMBASE
TI Sulfate could mediate the therapeutic effect of **glucosamine** sulfate.
AU Hoffer L.J.; Kaplan L.N.; Hamadeh M.J.; Grigoriu A.C.; Baron M.
CS Dr. L.J. Hoffer, Lady Davis Inst. for Medica Res, Jewish General Hospital, 3755 Cote-Ste-Catherine Rd, Montreal, Que. H3T 1E2, Canada
SO Metabolism: Clinical and Experimental, (2001) 50/7 (767-770).
Refs: 31
ISSN: 0026-0495 CODEN: METAAJ
CY United States
DT Journal; Article
FS 037 Drug Literature Index
031 Arthritis and Rheumatism
030 Pharmacology
LA English
SL English
AB **Glucosamine** sulfate is a controversial osteoarthritis remedy that is presumed to stimulate articular cartilage glycosaminoglycan synthesis by increasing **glucosamine** concentrations in the joint space. However, this is not plausible because even large oral doses of the product have no effect on serum **glucosamine** consertions. We propose instead that sulfate could mediate the clinical benefit attributed to this treatment. Sulfate is required for glycosaminoglycan synthesis, and unlike **glucosamine**, its serum level can be modified by dietary and other factors. In this study, we tested whether oral **glucosamine** sulfate increases serum sulfate concentrations and whether the sulfate concentration in the synovial fluid reflects that in the serum. The serum sulfate concentration of 7 normal subjects was 331 .+-. 21 .mu.mol/L before ingestion of 1.0 g **glucosamine** sulfate and 375 .+-. 17 .mu.mol/L 3 hours after (P < .05). Serum sulfate concentrations decreased from 325 .+-. 19 to 290 .+-. 19 .mu.mol/L when the same dose of **glucosamine** sulfate was ingested with 1.0 g of the analgesic drug acetaminophen, which is largely metabolized by sulfation (P < .05). Unlike **glucosamine** sulfate, oral sodium sulfate did not significantly increase the serum sulfate concentration. Synovial fluid and serum sulfate concentrations were closely similar when measured in 15 patients undergoing diagnostic needle aspiration of a knee effusion (r = .99, slope =.97, P < .0001). These results do not prove that **glucosamine** sulfate improves osteoarthritis, but considered with other data, they do provide a plausible biochemical mechanism for its reported beneficial effects. This hypothesis is clinically relevant because it predicts that nonsulfate salts of **glucosamine** will be ineffective and that renal function, diet, and **concurrent** acetaminophen therapy could confound clinical trials of this therapy. 
CT Medical Descriptors:
human
controlled study
clinical article
male

female
drug effect
osteoarthritis: DT, drug therapy
articular cartilage
glycosaminoglycan metabolism
drug potentiation
drug synovial fluid level
drug blood level
dietary intake
concentration (parameters)
dose response
sulfation
drug metabolism
joint effusion: DI, diagnosis
joint effusion: DT, drug therapy
needle biopsy
prediction
kidney function
article
priority journal
Drug Descriptors:
***glucosamine sulfate: DT, drug therapy**
***glucosamine sulfate: PD, pharmacology**
***glucosamine sulfate: CR, drug concentration**
***glucosamine sulfate: IT, drug interaction**
***glucosamine sulfate: CB, drug combination**
***glucosamine sulfate: PO, oral drug administration**
***glucosamine sulfate: DO, drug dose**
***glucosamine sulfate: CM, drug comparison**
***glucosamine sulfate: PK, pharmacokinetics**
*sulfate
glycosaminoglycan: EC, endogenous compound
**paracetamol: CB, drug combination**
**paracetamol: PK, pharmacokinetics**
**paracetamol: DT, drug therapy**
sodium sulfate: PO, oral drug administration
sodium sulfate: CM, drug comparison
sodium sulfate: PD, pharmacology

RN (**glucosamine** sulfate) **29031-19-4**; (sulfate) 14808-79-8; (paracetamol) 103-90-2; (sodium sulfate) 7757-82-6
CO SISU Enterprises (Canada)

L91 ANSWER 2 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN **2001252379** EMBASE
TI Current concepts regarding pharmacologic treatment of rheumatoid and osteoarthritis.
AU Wildy K.S.; Wasko M.C.M.
CS Dr. M.C.M. Wasko, Division of Rheumatology, 3500 Terrace Street, BST South 700, Pittsburgh, PA 15261, United States
SO Hand Clinics, (2001) 17/2 (321-338).
Refs: 76
ISSN: 0749-0712 CODEN: HACLEO
CY United States
DT Journal; General Review
FS 031 Arthritis and Rheumatism
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English
AB Treating patients with osteoarthritis (OA) and rheumatoid arthritis (RA) remains challenging; however, new agents offer the chance for an improved quality of life. As an alternative to traditional nonsteroidal anti-inflammatories, cyclooxygenase-2 inhibitors provide pain relief for

OA and RA patients with possible fewer side effects. Otherwise, OA patients may opt for topical agents, injections, or supplements. Rheumatoid arthritis research has led to an improved understanding of the inflammatory cascade and an appreciation of the early tissue destruction. A new treatment philosophy has thus emerged along with the development of new biologic agents; the latter, along with **combination** therapy and a new disease modifying antirheumatic drug, leflunomide, have greatly expanded the chances for disease control in RA patients.

CT Medical Descriptors:
*rheumatoid arthritis: DT, drug therapy
*rheumatoid arthritis: ET, etiology
*osteoarthritis: DT, drug therapy
*osteoarthritis: ET, etiology
drug effect
enzyme activity
enzyme blood level
drug mechanism
treatment outcome
dose response
risk factor
protein expression
disease severity
drug indication
dyspepsia: SI, side effect
abdominal pain: SI, side effect
analgesia
risk assessment
nausea and vomiting: SI, side effect
headache: SI, side effect
bone marrow suppression: SI, side effect
drug potency
rash: SI, side effect
alopecia: SI, side effect
human
clinical trial
review
Drug Descriptors:
*nonsteroid antiinflammatory agent: AE, adverse drug reaction
*nonsteroid antiinflammatory agent: DT, drug therapy
*nonsteroid antiinflammatory agent: TO, drug toxicity
*nonsteroid antiinflammatory agent: PD, pharmacology
*corticosteroid: AE, adverse drug reaction
*corticosteroid: DT, drug therapy
*corticosteroid: PD, pharmacology
*corticosteroid: AR, intraarticular drug administration
*corticosteroid: PO, oral drug administration
*cyclooxygenase 2 inhibitor: AE, adverse drug reaction
*cyclooxygenase 2 inhibitor: DT, drug therapy
*cyclooxygenase 2 inhibitor: PD, pharmacology
*antirheumatic agent: AE, adverse drug reaction
*antirheumatic agent: CT, clinical trial
*antirheumatic agent: DT, drug therapy
*antirheumatic agent: PD, pharmacology
cyclooxygenase 1: EC, endogenous compound
cyclooxygenase 2: EC, endogenous compound
arachidonic acid: EC, endogenous compound
leukotriene: EC, endogenous compound
phospholipase A2: EC, endogenous compound
thromboxane A2: EC, endogenous compound
**ketoprofen: DT, drug therapy**
**flurbiprofen: DT, drug therapy**
**indometacin: DT, drug therapy**
**piroxicam: DT, drug therapy**

**naproxen: DT, drug therapy**
**ibuprofen: DT, drug therapy**
**diclofenac: DT, drug therapy**
**etodolac: DT, drug therapy**
meloxicam: DT, drug therapy
rofecoxib: AE, adverse drug reaction
rofecoxib: DT, drug therapy
celecoxib: AE, adverse drug reaction
celecoxib: DT, drug therapy
hyaluronic acid: DT, drug therapy
**glucosamine sulfate: DT, drug therapy**
hydroxychloroquine: AE, adverse drug reaction
hydroxychloroquine: CT, clinical trial
**hydroxychloroquine: CB, drug combination**
hydroxychloroquine: DT, drug therapy
hydroxychloroquine: PD, pharmacology
salazosulfapyridine: AE, adverse drug reaction
salazosulfapyridine: CT, clinical trial
**salazosulfapyridine: CB, drug combination**
salazosulfapyridine: DT, drug therapy
salazosulfapyridine: PD, pharmacology
methotrexate: AE, adverse drug reaction
methotrexate: CT, clinical trial
**methotrexate: CB, drug combination**
methotrexate: DT, drug therapy
methotrexate: PD, pharmacology
methotrexate: PO, oral drug administration
cyclosporin: AE, adverse drug reaction
**cyclosporin: CB, drug combination**
cyclosporin: DT, drug therapy
cyclosporin: PD, pharmacology
leflunomide: AE, adverse drug reaction
leflunomide: DT, drug therapy
leflunomide: PD, pharmacology
etanercept: CT, clinical trial
etanercept: DT, drug therapy
etanercept: PD, pharmacology
infliximab: CT, clinical trial
infliximab: DT, drug therapy
infliximab: PD, pharmacology
glucocorticoid: AE, adverse drug reaction
glucocorticoid: DT, drug therapy
**capsaicin: AE, adverse drug reaction**
**capsaicin: DT, drug therapy**
**capsaicin: TP, topical drug administration**
azathioprine: DT, drug therapy
**actron**
**diclofenac potassium**

RN (arachidonic acid) 506-32-1, 6610-25-9, 7771-44-0; (phospholipase A2) 9001-84-7; (thromboxane A2) 57576-52-0; (**ketoprofen**) **22071-15-4**, 57495-14-4; (flurbiprofen) 5104-49-4; (indometacin) 53-86-1, 74252-25-8, 7681-54-1; (piroxicam) 36322-90-4; (naproxen) 22204-53-1, 26159-34-2; (**ibuprofen**) **15687-27-1**; (diclofenac) 15307-79-6, 15307-86-5; (etodolac) 41340-25-4; (meloxicam) 71125-38-7; (rofecoxib) 162011-90-7, 186912-82-3; (celecoxib) 169590-42-5; (hyaluronic acid) 31799-91-4, 9004-61-9, 9067-32-7; (**glucosamine** sulfate) **29031-19-4**; (hydroxychloroquine) 118-42-3, 525-31-5; (salazosulfapyridine) 599-79-1; (methotrexate) 15475-56-6, 59-05-2, 7413-34-5; (cyclosporin) 79217-60-0; (leflunomide) 75706-12-6; (etanercept) 185243-69-0, 200013-86-1; (infliximab) 170277-31-3; (capsaicin) 404-86-4; (azathioprine) 446-86-6; (diclofenac potassium) 15307-81-0

CN (1) Remicade; Orudis; Actron; Ansaid; Indocin; Feldene; Naprosyn; Motrin;

Advil; Voltaren; Cataflam; Lodine; Mobic; Vioxx; Celebrex; Plaquenil; Azulfidine; Arava
CO (1) Centecor (United States)

L91 ANSWER 3 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN **2000063108** EMBASE
TI **Glucosamine** in the treatment of osteoarthritis.
AU Delafuente J.C.
CS J.C. Delafuente, 410 North 12th Street, Richmond, VA 23298-0533, United States
SO Rheumatic Disease Clinics of North America, (2000) 26/1 (1-11).
Refs: 21
ISSN: 0889-857X CODEN: RDCAEK
CY United States
DT Journal; General Review
FS 031 Arthritis and Rheumatism
033 Orthopedic Surgery
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English
AB **Glucosamine** sulfate, a constituent of cartilage, is evaluated for the treatment of osteoarthritis. Available data suggest that **glucosamine** decreases pain and improves function in osteoarthritis. Most of the **glucosamine** studies have methodological flaws or used parenteral **formulations**, making their data difficult to extrapolate into clinical practice. **Glucosamine** sulfate is shown to be as good as **ibuprofen** for osteoarthritis of the knee. Better designed clinical trials of **glucosamine** are needed to identify its role in the pharmacotherapy of osteoarthritis.
CT Medical Descriptors:
*knee osteoarthritis
*pain assessment
functional disease
drug efficacy
drug mechanism
articular cartilage
drug bioavailability
dose response
heartburn: SI, side effect
epigastric pain: SI, side effect
nausea: SI, side effect
diet supplementation
human
controlled study
review
priority journal
Drug Descriptors:
***glucosamine sulfate: AE, adverse drug reaction**
***glucosamine sulfate: AD, drug administration**
***glucosamine sulfate: CM, drug comparison**
***glucosamine sulfate: DO, drug dose**
***glucosamine sulfate: PK, pharmacokinetics**
***glucosamine sulfate: PD, pharmacology**
***glucosamine sulfate: AR, intraarticular drug administration**
***glucosamine sulfate: IM, intramuscular drug administration**
***glucosamine sulfate: IV, intravenous drug administration**
***glucosamine sulfate: PO, oral drug administration**
**ibuprofen: CM, drug comparison**
**ibuprofen: DO, drug dose**
**ibuprofen: PD, pharmacology**
placebo

chlorbutol: CM, drug comparison
chlorbutol: IM, intramuscular drug administration
piperazine: CM, drug comparison
piperazine: IM, intramuscular drug administration
chondroitin sulfate

RN (**glucosamine** sulfate) **29031-19-4**; (**ibuprofen**) **15687-27-1**; (chlorbutol) 57-15-8; (piperazine) 110-85-0, 142-63-2, 142-64-3, 16832-43-2, 6094-40-2; (chondroitin sulfate) 9007-28-7, 9082-07-9

L91 ANSWER 4 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN **94150643** EMBASE
DN **1994150643**
TI **Glucosamine** sulfate compared to **ibuprofen** in osteoarthritis of the knee.
AU Muller-Fassbender H.; Bach G.L.; Haase W.; Rovati L.C.; Setnikar I.
CS Department of Clinical Pharmacology, Rotta Research Laboratorium, Via Valosa di Sopra 7,20052 Monza, Italy
SO Osteoarthritis and Cartilage, (1994) 2/1 (61-69).
ISSN: 1063-4584 CODEN: OSCAEO
CY United Kingdom
DT Journal; Article
FS 019 Rehabilitation and Physical Medicine
031 Arthritis and Rheumatism
030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English
AB **Glucosamine** sulfate is able to stimulate proteoglycan synthesis by chondrocytes and has mild anti-inflammatory properties. In clinical trials, **glucosamine** sulfate was more effective than placebo in controlling the symptoms of osteoarthritis (OA). In order to better characterize this therapeutic activity, we conducted a randomized, double-blind, parallel-group study of **glucosamine** sulfate 500 mg t.i.d. vs **ibuprofen** 400 mg t.i.d., orally for 4 weeks. The study included 200 hospitalized patients with active OA of the knee, symptoms for at least 3 months and a Lequesne's index of at least 7 points. Patients were evaluated weekly. Response was defined as a reduction in the Lequesne's index by at least 2 points if the enrolment value was higher than 12 points, or by at least 1 point if the enrolment value was 12 or less points, **together** with a positive overall assessment by the investigator. The improvement tended to be sooner under **ibuprofen** (48% responders vs 28% after the 1st treatment week; P = 0.06, Fisher's Exact test), but there was no difference from the 2nd week onward, with a success rate of 52% in the **ibuprofen** group and of 48% in the **glucosamine** group (P = 0.67) at the end of treatment. The average Lequesne's index at enrolment was around 16 points and decreased by over 6 points in both groups, again with the above described trend. On the other hand, 35% of patients on **ibuprofen** reported adverse events, mainly of gastrointestinal origin, vs 6% adverse events with **glucosamine** (P < 0.001, Fisher's Exact test). The number of adverse event related drop-outs was different between the two groups (7% vs 1%, respectively; P = 0.035). **Glucosamine** sulfate was therefore as effective as **ibuprofen** on symptoms of knee OA. These data confirm **glucosamine** sulfate as a safe symptomatic Slow Acting Drug for OA.
CT Medical Descriptors:
*knee osteoarthritis: DT, drug therapy
*knee osteoarthritis: TH, therapy
adult
aged
article

clinical trial
controlled study
double blind procedure
fatigue: SI, side effect
female
flushing
gastrointestinal disease: SI, side effect
human
major clinical study
male
oral drug administration
priority journal
pruritus: SI, side effect
randomized controlled trial
rash: SI, side effect
side effect
Drug Descriptors:
***glucosamine sulfate: DT, drug therapy**
***glucosamine sulfate: AE, adverse drug reaction**
***glucosamine sulfate: CM, drug comparison**
***glucosamine sulfate: CT, clinical trial**
***ibuprofen: DT, drug therapy**
***ibuprofen: AE, adverse drug reaction**
***ibuprofen: CM, drug comparison**
***ibuprofen: CT, clinical trial**
RN (**glucosamine** sulfate) **29031-19-4**; (**ibuprofen**) **15687-27-1**

L91 ANSWER 5 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN **80119580** EMBASE
DN **1980119580**
TI Biochemical gastroprotection from acute ulceration induced by aspirin and related drugs.
AU Rainsford K.D.; Whitehouse M.W.
CS Biochem. Dept., Univ. Tasmania Med. Sch., Hobart, Australia
SO Biochemical Pharmacology, (1980) 29/9 (1281-1289).
CODEN: BCPCA6
CY United Kingdom
DT Journal
FS 037 Drug Literature Index
030 Pharmacology
LA English
AB Adjuncts that serve as: (a) buffers to neutralize drug acidity, and/or (b) solubilizers of acidic drugs, or (c) certain nutrients (e.g. glucose, acetate), considerably reduced the gastric mucosal injury induced by orally administered aspirin (and other non-steroidal anti-inflammatory drugs) in stressed and starved rats. Gastroprotection against aspirin and related drugs was obtained by supplying the mucosa with glucose with intermediates or precursors of the tricarboxylic acid cycle (that may be absorbed directly from the gastric lumen). Glucose alone was not sufficiently gastroprotective. Gastroprotection with tricarboxylic acid cycle precursors given with glucose appears to be due to the effects of these nutrients in restoring ATP synthesis in the gastric mucosa. D-glutamate and D-aspartate were deaminated by homogenates prepared from saline-washed rat fundic mucosa (yielding .alpha.-oxo acids for the tricarboxylic acid cycle). These amino acids could be substituted for the L-forms in **combination** with glucose to yield gastroprotection from damage by aspirin. Studies in domestic pigs (a species with a pseudo-human stomach) established that acute and chronic oral administration of the aspirin+acetate+glucose **combination** (1:3:3 molar proportions) was less irritating to the gastric mucosa than aspirin alone. These results were confirmed in acute studies in monkeys. Sodium and potassium salts were superior to calcium and ammonium salts as the

buffer component in these improved (i.e. less gastrotoxic) aspirin **formulations** tested in rats. Bicarbonate was not effective in preventing aspirin gastrotoxicity in stressed-sensitized rats, but is effective in non-stressed rats.

CT Medical Descriptors:
*3,5 dibromoacetylsalicylic acid
*cell metabolism
*formate sodium
*malate sodium
*maleate sodium
*malonate sodium
*stomach mucosa
*stomach ulcer
adverse drug reaction
pathogenesis
ph
stress
etiology
preliminary communication
animal experiment
oral drug administration
stomach
swine
rat
drug comparison
Drug Descriptors:
*3 hydroxybutyric acid
*acetic acid
***acetylsalicylic acid**
*alanine
*ammonium acetate
*antiinflammatory agent
*arginine
*aspartic acid
*benzoic acid
*butyric acid
*calcium acetate
*citrate trisodium
*citric acid
*disodium hydrogen phosphate
*fructose
*galactose
*glucose
*glutamine
*glycerol
*glycine
*lactate sodium
*lactose
*lysine
***n acetylglucosamine**
*sodium dihydrogen phosphate
*pyruvate sodium
*ribose
*sucrose

RN (3 hydroxybutyric acid) 300-85-6; (acetic acid) 127-08-2, 127-09-3, 64-19-7, 71-50-1; (acetylsalicylic acid) 493-53-8, 50-78-2, 53663-74-4, 53664-49-6, 63781-77-1; (alanine) 56-41-7, 6898-94-8; (ammonium acetate) 631-61-8; (arginine) 1119-34-2, 15595-35-4, 7004-12-8, 74-79-3; (aspartic acid) 56-84-8, 6899-03-2; (benzoic acid) 532-32-1, 582-25-2, 65-85-0, 766-76-7; (butyric acid) 107-92-6, 156-54-7, 461-55-2; (calcium acetate) 62-54-4; (citrate trisodium) 6132-04-3, 68-04-2; (citric acid) 126-44-3, 5949-29-1, 77-92-9, 8002-14-0; (disodium hydrogen phosphate) 7558-79-4; (fructose) 30237-26-4, 57-48-7, 7660-25-5, 77907-44-9; (galactose)

26566-61-0, 50855-33-9, 59-23-4; (glucose) 50-99-7, 84778-64-3; (glutamine) 56-85-9, 6899-04-3; (glycerol) 56-81-5; (glycine) 56-40-6, 6000-43-7, 6000-44-8; (lactate sodium) 72-17-3; (lactose) 10039-26-6, 16984-38-6, 63-42-3, 64044-51-5; (lysine) 56-87-1, 6899-06-5, 70-54-2; (n **acetylglucosamine**) **7512-17-6**; (sodium dihydrogen phosphate) 7558-80-7, 7632-05-5; (pyruvate sodium) 113-24-6; (ribose) 34466-20-1, 50-69-1, 93781-19-2; (sucrose) 122880-25-5, 57-50-1
CN Aspirin

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=> d all abeq tech abex tot l128

L128 ANSWER 1 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **2002-616446** [66] WPIX
DNN **N2002-487716** DNC **C2002-174257**
TI Method, useful for treating musculoskeletal disorders, comprises topical application of a composition comprising penetration enhancers and an antiinflammatory agent in a gel vehicle.
DC A96 B04 B05 P34
IN PETRUS, E J
PA (ADME-N) ADVANCED MEDICAL INSTR
CYC 1
PI US 6399093 B1 20020604 (200266)* 9p A61L015-16
ADT US 6399093 B1 US 1999-314829 19990519
PRAI US 1999-314829 19990519
IC ICM A61L015-16
AB US 6399093 B UPAB: 20021014
NOVELTY - Method (I), comprises topical application of a composition (II) comprising:

(A) penetration enhancers from alcohols, polyols, sulfoxides, esters, ketones, amides, oleates, surfactants, alkanoic acids, lactam compounds, alkanols or dialkylamino acetates; and

(B) an antiinflammatory agent from non-steroidal antiinflammatory agent or colchicine (0.1 - 25% of (I)), in a gel vehicle.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a composition (II) for use in the method.

ACTIVITY - Osteopathic; Muscular; Antiinflammatory; Analgesic.

No biological data available.

MECHANISM OF ACTION - None given.

USE - (I) is useful for treating musculoskeletal disorders (claimed) and providing antiinflammatory and analgesic benefits.

Dwg.0/0

FS CPI GMPI

FA AB; DCN

MC CPI: A99-A; B04-A10; B06-A01; B06-A03; B06-E05; B08-D01; B10-A10; B10-B02A; **B10-C04C**; **B14-C01**; B14-C03

TECH UPTX: 20021014

TECHNOLOGY FOCUS - BIOLOGY - Preferred Composition: (II) may further include analgesics, antioxidants, anti-infective agents, adjuvants, anthocyanidins, proanthocyanidins, muscle relaxants, nitric oxide synthase inhibitors, methyl-sulfonyl-methane, S-adenosyl-methionine, zinc compounds, aloe vera extract, amino sugars, glycosaminoglycans, manganese, magnesium, boron or herbal derivatives (claimed).

(II) comprises 0.2 - 0.5 mg of colchicine and 2 - 6% of etodolac, **ibuprofen** or diclofenac.

ABEX

EXAMPLE - A typical joint analgesic gel comprises **ibuprofen** (5%), carboxyvinyl polymers (2%), aloe vera gel (1%), propylene glycol (20%), **glucosamine** sulfate (20%), methyl-sulfonyl-methane (10%), ethanol (10%), triethanolamine (1%), zinc sulfate (1%), methyl paraben (0.1%), propyl paraben (0.02%) and water (29.9%).

L128 ANSWER 2 OF 12 WPIX (C) 2003 THOMSON DERWENT

AN **2002-372086** [40] WPIX

DNC **C2002-105331**

TI Composition used for treating pain comprises **glucosamine** material and analgesic compound.

DC B05

IN **COWAN, A; RAFFA, R; TALLARIDA, R**

PA (UTEM) UNIV TEMPLE

CYC 97

PI WO 2002026239 A1 20020404 (200240)* EN 23p A61K031-70

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

US 2002058642 A1 20020516 (200240) A61K031-7008

AU 2001092929 A 20020408 (200252) A61K031-70

ADT WO 2002026239 A1 WO 2001-US29606 20010921; US 2002058642 A1 Provisional US 2000-235405P 20000926, US 2001-964178 20010925; AU 2001092929 A AU 2001-92929 20010921

FDT AU 2001092929 A Based on WO 200226239

PRAI US 2000-235405P 20000926; US 2001-964178 20010925

IC ICM A61K031-70; A61K031-7008

ICS A61K031-192

AB WO 200226239 A UPAB: 20020626

NOVELTY - Dosage form (I) comprises a **glucosamine** material (II) and an analgesic compound (III) in a weight ratio that results in an analgesic effect at least as great as that expected for the analgesic alone at that dosage.

ACTIVITY - Analgesic.
MECHANISM OF ACTION - None given in the source material.
USE - Useful for the control of pain caused by a wide variety of disorders e.g. colds and influenza, arthritis, headache, toothache, dysmenorrhea, surgery and muscle and joint pain.
ADVANTAGE - The components of (I) give a synergistic analgesic effect.
DESCRIPTION OF DRAWING(S) - The drawing shows the analgesic effect of **ibuprofen** alone and a combination of **ibuprofen** and **glucosamine** sulfate on acetylcholine-induced abdominal constrictions in mice.
Dwg.1/3

FS CPI
FA AB; GI; DCN
MC CPI: **B10-A07**; **B10-C04B**; **B10-C04C**; **B14-C01**; B14-C09; **B14-S09**
TECH UPTX: 20020626
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Materials: (III) Comprises a non steroidal antiinflammatory drug, preferably a propionic acid analgesic, **ibuprofen** or **ketoprofen**. (II) Is **glucosamine** or its salts, alpha- or beta-**glucosamine**, N-**acetyl glucosamine**, **glucosamine** sulfate or **glucosamine** hydrochloride.
Preferred Composition: The ratio of (II) to (III) is at least 1:2, especially 1:2-10:1. (I) Also contains anti arthritic, antihistamine, muscle relaxant, sleep aid, decongestant and/or bronchodilator.
ABEX
ADMINISTRATION - The dosage is 10-6000 mg/kg/day orally, parenterally or topically.

EXAMPLE - **Glucosamine** sulfate (250 mg) and **ibuprofen** (27.8 mg) were combined with water (10 ml) containing 2 drops of Tween (RTM; dispersant) to give a composition with a **glucosamine** to **ibuprofen** weight ratio of 5.2:1.
In tests on mice, various combinations of **glucosamine** sulfate and analgesic were administered and the pain relief recorded using an acetylcholine-induced abdominal constriction model. The results showed that **ibuprofen** alone exhibited an ED50 value of 26 mg/kg, but the combination of **ibuprofen** with **glucosamine** sulfate (9:1 ratio) gave an ED50 value of 2.08 mg/kg.

L128 ANSWER 3 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **2002-179010** [23] WPIX
CR 2002-082384 [01]; 2002-082386 [01]; 2002-082387 [01]; 2002-121526 [11]; 2002-381872 [36]
DNC **C2002-055485**
TI Composition useful for treatment of pain comprises a pharmaceutical, nutraceutical and a base.
DC B05
IN GELBER, D; KLEINBERGER, R
PA (GELB-I) GELBER D; (KLEI-I) KLEINBERGER R
CYC 1
PI US 2002006445 A1 20020117 (200223)* 16p A61K035-78
ADT US 2002006445 A1 Provisional US 2000-184351P 20000223, US 2001-754204 20010105
PRAI US 2000-184351P 20000223; US 2001-754204 20010105
IC ICM A61K035-78
AB US2002006445 A UPAB: 20020701
NOVELTY - A composition comprises at least one pharmaceutical (P1), at least one nutraceutical (N1) for treating pain resulting from an inflammatory response and a base.
ACTIVITY - Analgesic; virucide, antiallergic; antimigraine; gynecological; antiinflammatory; antiarthritic; antipyretic; antitussive.

MECHANISM OF ACTION - None given.

USE - For the treatment of a patient suffering from pain resulting from an inflammatory response (claimed); also for the treatment of predetermined symptoms of an ailment; for the treatment of symptoms of colds, flu, allergies or sinus discomfort; for discomfort associated with heartburn, general body aches, headaches, migraines, menstruation, joint discomfort and arthritis. Also useful for the treatment of immune response (e.g. sinus congestion; red, itchy or watery eyes; and sneezing) resulting from exposure to atmospheric pollutants or allergens. Useful in healing process as well as preventing future maladies.

ADVANTAGE - The composition comprising combinations of pharmaceutical and nutraceutical increases the beneficial effects of the pharmaceutical utilized. The composition not only treats a current ailment more effectively, but also functions to prevent the recurrence of illness.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B03-F; B04-A07E; B04-A08; B04-A10; B04-C02; B05-A03A; B06-D01; B06-F03; B07-A01; B07-D02; B07-D08; B10-A10; B10-B02; B10-C04; B10-D03; B10-F02; B14-A02; **B14-C01**; B14-C03; B14-C04; B14-C09; B14-G02A; B14-K01B; B14-N14; B14-S08

TECH UPTX: 20020411

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Components: (P1) is selected from a group consisting of pain relieving and/or anti-inflammatory agents (preferably acetaminophen and/or non-steroidal anti-inflammatory drug (NSAID)). (N1) is selected from immune boosters, anti-oxidants, a liver protectant and/or joint relief agents. The nutraceutical immune booster is selected from zinc and its salt and at least one herb selected from Echinacea, Sambucus and/or Goldenseal. The nutraceutical anti-oxidant is selected from a bioflavonoid, at least one herbal extract containing at least one bioflavonoid, ascorbic acid and its salt, garlic and its extract, green tea and its extracts, and/or at least one herb selected from Astragalus. The nutraceutical liver protectant is milk thistle. The nutraceutical joint relief agent is selected from **glucosamine**, **glucosamine** sulfate, chondroitin, chondroitin sulfate and its salts.

ABEX

SPECIFIC COMPOUNDS - Acetaminophen, diclophenac, fenflofenac, aspirin, indomethacin, sulindac, tolmetin, **ibuprofen**, **ketoprofen**, fenoprofen, flurbiprofen, naproxen, meclofenamic acid, flufenamic acid, piroxicam, tenoxicam, meloxicam, celicoxib, roficoxib and/or nabumetone are specifically claimed as (P1).

ADMINISTRATION - The composition is administered orally and topically onto nasal mucosa.

EXAMPLE - A solid composition comprised (mg) acetaminophen (60 - 1000, preferably 200 - 750 and more preferably 350 - 550), diphenhydramine (5 - 100, preferably 10 - 50, more preferably 20 - 40), pseudoephedrine (5 - 100, preferably 10 - 75, more preferably 20 - 40), Echinacea purpurea (10 - 500, preferably 25 - 200, more preferably 50 - 100), Goldenseal (50 - 200, preferably 75 - 150, more preferably 80 - 120), Elderberry (sambucol) (50 - 250, preferably 75 - 175, more preferably 100 - 150), garlic extract (50 - 200, preferably 75 - 150, more preferably 80 - 120), green tea extract (50 - 120, preferably 75 - 150, more preferably 80 - 120), astragalus (50 - 250, preferably 75 - 175, more preferably 100 - 150), zinc gluconate (0.1 - 15, preferably 0.5 - 10, more preferably 0.5 - 7.5 and ascorbic acid (50 - 1000, preferably 100 - 750, more preferably 200 - 500). The composition is administered in the form of a capsule to a mammal, for treating the symptoms of a cold or flu every 4 - 6 hours to relieve pain and discomfort and to provide immune system stimulation. Echinacea purpurea and Astragalus assisted in boosting the immune system while the pharmaceutical components treat the symptoms associated with inflammatory and mucous accumulation.

L128 ANSWER 4 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **2001-565929** [64] WPIX
CR 2001-457762 [50]
DNC **C2001-167995**
TI Treatment of photophobia and phonophobia associated with migraine attack, comprises use of **ibuprofen**.
DC A96 B05
IN CODISPOTI, J R
PA (MCNI) MCNEIL-PPC INC
CYC 31
PI CA 2326549 A1 20010524 (200164)* EN 23p A61K031-192
CN 1298700 A 20010613 (200164) A61K031-19
EP 1129710 A2 20010905 (200164) EN A61K031-192
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
JP 2001192332 A 20010717 (200164) 6p A61K031-192
KR 2001051939 A 20010625 (200172) A61K031-192
NZ 508292 A 20020830 (200265) A61K031-615
ADT CA 2326549 A1 CA 2000-2326549 20001123; CN 1298700 A CN 2000-128380 20001123; EP 1129710 A2 EP 2000-310391 20001123; JP 2001192332 A JP 2000-356516 20001122; KR 2001051939 A KR 2000-70461 20001124; NZ 508292 A NZ 2000-508292 20001120
FDT NZ 508292 A Div in NZ 518742
PRAI US 2000-709069 20001109; US 1999-449124 19991124
IC ICM A61K031-19; A61K031-192; A61K031-615
ICS A61K031-535; A61P025-06
AB CA 2326549 A UPAB: 20021010
NOVELTY - A method for mitigation or treatment of photophobia and phonophobia associated with migraine comprises the use of **ibuprofen** (a), its salts (b) and/or its isomers (c).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(i) a medicament for mitigating or treating photophobia and phonophobia associated with migraine comprising (a), (b) and/or (c);

(ii) a composition for mitigating or treating photophobia and phonophobia associated with migraine comprising (a), (b) and/or (c); and

(iii) a commercial package for mitigating or treating photophobia and phonophobia associated with migraine, which comprises (a), (b) and/or (c) together with instructions for use of the package.

ACTIVITY - Antimigraine; analgesic; antiinflammatory.

Of the 650 patients suffering from photophobia due to migraine some patients were given placebo, while others were given either 200 or 400 mg of **ibuprofen**. Periodic assessments of their photophobia were made by determining % of patients with severity reduced to zero. The results for **ibuprofen** (200 mg)/**ibuprofen** (400 mg)/placebo-treated patients showed that % of patients with photophobia severity reduced to zero at a time (hours) of 2, 3 and 5 was 22/19/15; 29/26/19 and 37/34/26 respectively.

MECHANISM OF ACTION - None given.

USE - For mitigating or treating photophobia and phonophobia associated with migraines (claimed).

ADVANTAGE - The method utilizes the action of a single active ingredient, which is commercially available and does not cause undesired side effects.

Dwg.0/2
FS CPI
FA AB; DCN
MC CPI: A12-V01; **B10-C04C**; **B14-C01**; B14-C03; B14-J01
TECH UPTX: 20011105
TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Component: (b) is an inorganic cation salt (preferably sodium, potassium, lithium, magnesium, calcium, cesium, ammonia, ferrous, zinc, manganous, aluminum, ferric or manganic).

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: (b) is an inorganic cation salt and/or an organic salt of (a) with primary, secondary, tertiary or quaternary amine (preferably triethylamine, tripropylamine, 2-dimethylaminoethanol, 2-diethylaminoethanol, lysine, arginine, histidine, caffeine, procain, N-ethyl piperidine, hydrabamine, choline, betaine, ethylenediamine, **glucosamine**, tris(hydroxymethyl)aminomethane, methylglycamine, theobromine, purine, piperazine, piperidine, or polyamine resin). The mixture of (a), (b) and (c) is preferably a mixture of (a) and its sodium salt. (c) is R-**ibuprofen** and/or S-**ibuprofen**.

ABEX

ADMINISTRATION - The administration is oral. The amount of **ibuprofen** and/or its isomer is 100-800 (preferably 200-400) mg per dose. The salt of the **ibuprofen** is administered in a dosage of about 100-1700 mg per dose, whereas the mixture of **ibuprofen**, its isomer and its salt is administered in a dosage of about 100-1700 (preferably 200-1300) mg per dose.

EXAMPLE - None given.

L128 ANSWER 5 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **2001-457762** [50] WPIX
CR 2001-565929 [64]
DNC **C2001-138476**
TI Use of an **ibuprofen** for treating photophobia and phonophobia associated with a migraine attack.
DC B05
IN CODISPOTI, J R
PA (MCNI) MCNEIL-PPC INC; (JOHJ) JOHNSON & JOHNSON
CYC 4
PI AU 2000071733 A 20010531 (200150)* 13p A61K031-192
BR 2000005560 A 20010731 (200150) A61K031-192
KR 2001051939 A 20010625 (200172) A61K031-192
ZA 2000006885 A 20021030 (200282) 16p A61K000-00
ADT AU 2000071733 A AU 2000-71733 20001121; BR 2000005560 A BR 2000-5560 20001124; KR 2001051939 A KR 2000-70461 20001124; ZA 2000006885 A ZA 2000-6885 20001123
PRAI US 1999-449124 19991124; US 2000-709069 20001109
IC ICM A61K000-00; A61K031-192
ICS A61P025-06
AB AU 200071733 A UPAB: 20021220
NOVELTY - Mitigation or treatment of photophobia and phonophobia associated with migraine involves the use of an **ibuprofen** (a), its salts (b) and/or its isomers (c).
ACTIVITY - Antimigraine; Analgesic; Antiinflammatory.
Of the 650 patients suffering from photophobia due to migraine some patients were given placebo, while others were given either 200 or 400 mg of **ibuprofen**. Periodic assessments of their photophobia were made by determining % of patients with severity reduced to zero. The results for **ibuprofen** (200 mg)/**ibuprofen** (400 mg)/placebo-treated patients showed that % of patients with photophobia severity reduced to zero at a time (hours) of 2,3 and 5 was 22/19/15; 29/26/19 and 37/34/26 respectively.
MECHANISM OF ACTION - None given.
USE - For mitigating or treating photophobia and phonophobia associated with migraines (claimed).
ADVANTAGE - The method utilizes the action of a single active ingredient, which is commercially available and does not cause undesired side effects.
Dwg.0/2
FS CPI
FA AB; DCN

MC CPI: **B10-C04C**; **B14-C01**; B14-N02; B14-N03
TECH UPTX: 20010905
TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Component: (b) is an inorganic cation salt (preferably sodium, potassium, lithium, magnesium, calcium, cesium, ammonia, ferrous, zinc, manganous, aluminum, ferric or manganic).

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: (b) is an inorganic cation salt; and/or an organic salt of (a) with primary, secondary, tertiary or quaternary amine (preferably triethylamine, tripropylamine, 2-dimethylaminoethanol, 2-diethylaminoethanol, lysine, arginine, histidine, caffeine, procain, N-ethyl piperidine, hydrabamine, choline, betaine, ethylenediamine, **glucosamine**, TRIS (hydroxymethyl)aminomethane, methylglycamine, theobromine, pruine, piperazine, and/or piperidine). The mixture of (a), (b) and (c) is preferably a mixture of (a) and its sodium salt. (c) is R-**ibuprofen** and/or S-**ibuprofen**.

TECHNOLOGY FOCUS - POLYMERS - The organic salt is a polyamine resin.

ABEX
ADMINISTRATION - The administration is oral. The amount of **ibuprofen** and/or its isomer is 100 - 800 (preferably 200 - 600, especially 200 - 400) mg per dose. The salt of the **ibuprofen** is administered in a dosage of about 100 - 1700 mg per dose, whereas the mixture of **ibuprofen**, its isomer and its salt is administered in a dosage of about 100 - 1700 (preferably 200 - 1300) mg per dose (all claimed).

EXAMPLE - None given.

L128 ANSWER 6 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **2001-182859** [18] WPIX
DNC **C2001-054566**
TI Treatment of pain due to degenerative joint diseases associated with inflammation in cats and dogs, using flupirtine as potent analgesic having low side-effect potential.
DC B05 C02 C03
IN ENDLER, G; LEHMANN, H; LOBISCH, M; SZELENYI, I; LOBICH, M
PA (ASTA) ASTA MEDICA AG; (FARB) BAYER AG; (DRED) AWD PHARMA GMBH & CO KG
CYC 56
PI WO 2001008682 A2 20010208 (200118)* DE 20p A61K031-44
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU BG BR BY CA CN CZ EE GE HR HU ID IL IN IS JP KG KR KZ LT LV MK MX NO NZ PL RO RU SG SI SK TR UA UZ YU ZA
CA 2314746 A1 20010203 (200119) EN A61K031-44
AU 2000072717 A 20010219 (200129) A61K031-44
NO 2002000364 A 20020123 (200231) A61K031-44
BR 2000012942 A 20020709 (200254) A61K031-44
EP 1242078 A2 20020925 (200271) DE A61K031-44
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
KR 2002040767 A 20020530 (200276) A61K031-44
ADT WO 2001008682 A2 WO 2000-EP7356 20000729; CA 2314746 A1 CA 2000-2314746 20000801; AU 2000072717 A AU 2000-72717 20000729; NO 2002000364 A WO 2000-EP7356 20000729, NO 2002-364 20020123; BR 2000012942 A BR 2000-12942 20000729, WO 2000-EP7356 20000729; EP 1242078 A2 EP 2000-960383 20000729, WO 2000-EP7356 20000729; KR 2002040767 A KR 2002-701445 20020201
FDT AU 2000072717 A Based on WO 200108682; BR 2000012942 A Based on WO 200108682; EP 1242078 A2 Based on WO 200108682
PRAI US 1999-147033P 19990803
IC ICM A61K031-44
ICS A61K009-20; A61K045-06; A61P019-00; A61P029-00
AB WO 200108682 A UPAB: 20010402

NOVELTY - The use of flupirtine (2-amino-3-ethoxycarbonylamino-6-(p-fluorobenzylamino)pyridine) (I) or its salt is claimed in the treatment of pain (and prevention of development of chronic pain) due to degenerative joint diseases associated with inflammation in cats and dogs.

ACTIVITY - Analgesic; antiarthritic; antirheumatic; antiinflammatory. In analgesic tests in dogs (I) had oral ID50 of 3.5 mg/kg, compared with 18 mg/kg for **ibuprofen**.

MECHANISM OF ACTION - Activator of noradrenergic descending pathway in the spinal cord; potentiator of antinociceptive GABA-ergic mechanisms; ATP-sensitive potassium ion channel opener; tension-dependent potassium ion channel opener.

USE - (I) is specifically used for treating hip joint dysplasia or pain due to patella dislocation, Dachshund paralysis or cauda-equina syndrome in dogs or cats (all claimed).

ADVANTAGE - (I) has strong analgesic activity and low toxicity and side-effect potential. In particular (I) causes no gastrointestinal, renal or hepatic damage on acute or long-term use (e.g. over 6-12 months).

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B07-D04C; **B14-C01**; C07-D04C; **C14-C01**
ABEX

ADMINISTRATION - (I) is formulated in granules, tablets (specifically film, chewable, 2-layer or retard tablets, especially tablets having single or double breakage indentations), bolus, powder, suppositories or injection solution, together with conventional carriers and auxiliaries (especially taste improvers in the case of oral preparations) (all claimed). Unit dose is typically 0.1-20 (preferably 1-5) mg/kg of (I) maleate (to a maximum of 600 mg/day) for oral administration, 0.1-30 (preferably 2.5-7.5) mg/kg of (I) maleate (to a maximum of 900 mg/day) for rectal administration or 1.5-5 mg/kg of (I) gluconate by (preferably intramuscular) injection. (I) is optionally used in combination with (a) antiinflammatories, especially selective COX-2 inhibitors (e.g. celecoxib, rofecoxib, valdecoxib or parecoxib), (b) other centrally acting analgesics (e.g. nefopam, tramadol, nalbuphine or dextropropoxyphene), (c) metamizol, (d) antirheumatic agents (e.g. chloroquine, hydroxychloroquine, methotrexate, penicillamine, ademetionine, sulfasalazin or beta-sitosterol), (e) vitamin B (e.g. thiamine, cyanocobalamine) or pyridoxine), (f) steroids (e.g. prednisolone). (g) chondro-protective agents (e.g. chondroitin, **glucosamine** or polysulfated glycosaminoglycan), (h) TNFalpha-receptors or (i) plant extracts (e.g. devil's claw root, stinging nettle leaf, guaiac wood, willow bark or arnica extract) (all claimed).

EXAMPLE - A mixture of 10 kg flupirtine (I), 2.5 kg calcium hydrogen phosphate and 2.5 kg maize starch was granulated with a solution of 1 kg polyvinyl pyrrolidone in 4 kg demineralized water. The granules were blended with 1.3 kg maize starch, 2 kg microcrystalline cellulose, 0.6 kg magnesium stearate, 0.1 kg highly dispersed silica and 1.5 kg Trigarol Digest P (RTM; taste improver), then pressed into 200 mg tablets of diameter of 9 mm and radius of curvature 10 mm, having double breakage indentations. Each tablet contained 100 mg of (I). Breaking strength was 80-100 N and disintegration time was 5 minutes.

L128 ANSWER 7 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **1999-620282** [53] WPIX
DNC **C1999-181043**
TI Pharmaceutical preparations containing hydrosoluble **ketoprofen** salts.
DC B03 B05
IN GIORGETTI, P L M
PA (ERRE-N) ERREKAPPA EUROTERAPICI SPA; (ERRE-N) ERREKAPPA EUROTERAPICI SAS
CYC 25
PI WO 9952528 A1 19991021 (199953)* EN 34p A61K031-40

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: CA CN JP KR US
EP 1024808 A1 20000809 (200039) EN A61K031-40
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE SI
CN 1263464 A 20000816 (200055) A61K031-40
KR 2001013712 A 20010226 (200154) A61K031-40
US 6291527 B1 20010918 (200157) A61K031-19
JP 2002510336 W 20020402 (200225) 34p C07D207-16
CH 692939 A5 20021231 (200305) A61K031-19

ADT WO 9952528 A1 WO 1999-IB626 19990409; EP 1024808 A1 EP 1999-910606 19990409, WO 1999-IB626 19990409; CN 1263464 A CN 1999-800474 19990409; KR 2001013712 A KR 1999-711727 19991211; US 6291527 B1 WO 1999-IB626 19990409, US 1999-445672 19991210; JP 2002510336 W JP 1999-551422 19990409, WO 1999-IB626 19990409; CH 692939 A5 CH 1998-843 19980411

FDT EP 1024808 A1 Based on WO 9952528; US 6291527 B1 Based on WO 9952528; JP 2002510336 W Based on WO 9952528

PRAI CH 1999-618 19990331; CH 1998-843 19980411

IC ICM A61K031-19; A61K031-40; C07D207-16
ICS A61K009-02; A61K009-06; A61K009-08; A61K009-10; A61K009-12; A61K009-16; A61K009-20; A61K009-48; A61K031-192; A61K031-70; A61K031-7008; A61P029-00; C07C051-41

ICA C07C059-84; C07H005-06

ICI C07C059:84

AB WO 9952528 A UPAB: 19991215
NOVELTY - Pharmaceutical preparations containing hydrosoluble **ketoprofen** salts obtained by reaction of **ketoprofen** and **glucosamine** and/or proline and/or hydroxyproline are new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for hydrosoluble salts contained in the pharmaceutical preparations characterized by the fact that they are obtained from **ketoprofen** and amino acids, in 0.8-1.2 times the equimolar quantities.
ACTIVITY - Antiinflammatory; Analgesic. The results obtained for the carrageenan edema test in the rat indicate that **ketoprofen** **glucosamine** salt, administered orally at doses of 0.5, 1 and 2 mg/kg, possesses antiinflammatory activity. The anti-edematogenic effect of the test compound is dose-dependent. **Ketoprofen** **glucosamine** significantly inhibits the reaction process by 30%, 48% and 72% at oral doses of 0.5, 1 and 2 mg/kg, respectively.
USE - The preparations are useful for antiinflammatory and analgesic treatment of joints and mucous membranes.
ADVANTAGE - The use of **ketoprofen** salts is advantageous with regard to bioavailability, tolerability and compliance.
Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B05-A01B; B05-C07; B07-D03; **B10-A07**; **B10-C04B**; B10-E04B; **B14-C01**; B14-C03

TECH UPTX: 19991215
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method: The hydrosoluble salts are obtained in water solution form and characterized by the fact that the synthesis is carried out at neutral pH at 5-60degreesC and that the concentration of salts obtained is at least 300 g l to part of -1. Alternatively the hydrosoluble salts are in solid form and the synthesis is carried out in at least one suitable organic solvent which, after reaction, is eliminated at a high temperature and/or reduced pressure.

ABEX
ADMINISTRATION - Administration is oral (e.g. as tablets, capsules, or granules), transdermal, intramuscular, topical or by injection. The preparation may be in the form of a solution, irrigation solution, mouthwash, suppository, vaginal bougies, gel, cream or foam. No actual dosage is given.

EXAMPLE - An injectable preparation for intramuscular administration

comprised (quantity for 1 unit): **ketoprofen glucosamine** (170 mg) equivalent to **ketoprofen** acid (100 mg), benzyl alcohol (90 mg), sodium chloride (27 mg) and water for injectable preparations (up to 3 ml).

L128 ANSWER 8 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **1995-123244** [16] WPIX
DNC **C1995-056213**
TI Compsn. for improved relief of cold, cold-like and/or flu symptoms - contains aminoacid salt of propionic acid non-steroidal antiinflammatory agent with decongestant, expectorant, antihistamine and antitussive.
DC B05
IN MITRA, S
PA (PROC) PROCTER & GAMBLE CO
CYC 24
PI WO 9507103 A1 19950316 (199516)* EN 18p A61K045-06
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
W: AU BR CA CN JP PL RU
AU 9476040 A 19950327 (199528) A61K045-06
EP 719156 A1 19960703 (199631) EN A61K045-06
R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
BR 9407414 A 19961112 (199651) A61K045-06
JP 09502201 W 19970304 (199719) 20p A61K031-045
CN 1130354 A 19960904 (199751) A61K045-06
ADT WO 9507103 A1 WO 1994-US9581 19940824; AU 9476040 A AU 1994-76040 19940824; EP 719156 A1 EP 1994-926020 19940824, WO 1994-US9581 19940824; BR 9407414 A BR 1994-7414 19940824, WO 1994-US9581 19940824; JP 09502201 W WO 1994-US9581 19940824, JP 1995-508695 19940824; CN 1130354 A CN 1994-193312 19940824
FDT AU 9476040 A Based on WO 9507103; EP 719156 A1 Based on WO 9507103; BR 9407414 A Based on WO 9507103; JP 09502201 W Based on WO 9507103
PRAI US 1993-116927 19930907
REP WO 9217171; WO 9217177
IC ICM A61K031-045; A61K045-06
ICS A61K031-085; A61K031-135; A61K031-19; A61K031-195; A61K031-205; A61K031-38; A61K031-40; A61K031-405; A61K031-415; A61K031-42; A61K031-44; A61K031-445; A61K031-485; A61K031-495; A61K031-50; A61K031-505; A61K031-52; A61K031-54; A61K031-55
AB WO 9507103 A UPAB: 19971222
A compsn. for alleviating cold, cold-like and/or flu symptoms comprises an aminoacid salt of a propionic acid non-steroidal anti-inflammatory agent together with at least one decongestant, one expectorant, one antihistamine and one antitussive.

The propionic acid deriv. is pref. **ibuprofen**, naproxen, benoxaprofen, flurbiprofen, **ketoprofen**, fenoprofen, fenbufen, indoprofen, pirprofen, carprofen, oxaprozin, pranoprofen, miroprofen, tioxaprofen, suprofen, alminoprofen, or tiaprofen (esp. **ibuprofen** , naproxen, flurbiprofen, or **ketoprofen**).

The aminoacid salt is pref. triethylamine, tripropylamine, 2-dimethylaminoethanol, 2-diethylaminoethanol, lysine, ornithine, arginine, histidine, caffeine, procain, N-ethylpiperidine, hydrabamine, choline, betaine, ethylenediamine, **glucosamine**, methylglucamine, theobromine, purine, piperazine or piperidine.

The decongestant is pref. pseudoephedrine, phenylpropanolamine, phenylephrine or ephedrine.

The antitussive is pref. dextromethorphan, chlophedianol, carbetapentane, caramiphen, noscapine, diphenhydramine, codeine, hydrocodone, hydromorphone or fominoben.

The expectorant is pref. glyceryl guaiacolate, terpin hydrate, ammonium chloride, N-acetylcysteine, bromhexine or ambroxol.

USE - The compsn. is useful for the treatment of cough, cold, cold-like and/or flu symptoms.

Dosage is 5 to 50 mg of S(+)**ketoprofen** lysinate, 50 to 800

mg of S(+)-**ibuprofen** lysinate, or 50 to 800 mg of S(+)-naproxen lysinate.
Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B04-A04; B04-A06; B06-D09; B07-H; **B10-A07**; B10-A22; B10-B01; B10-B02B; B10-B03B; B10-B04B; **B10-C04B**; **B10-C04C**; B10-E04B; B14-C03; B14-K01B; B14-K01E

L128 ANSWER 9 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **1992-168661** [21] WPIX
DNC **C1992-077552**
TI New complexes of phenyl-alkanoic acid(s) - esp. **ibuprofen** of naproxen, with amino sugar(s).
DC B05
IN PARADIES, H H; HASKO, H
PA (MEDI-N) MEDICE CHEM-PHARM PUTTER GMBH; (MEDI-N) MEDICE CHEM PHARM FAB PUETTER
CYC 24
PI

| | | | | | | |
|---|---|---|---|---|---|---|
| EP 486046 | A2 | 19920520 (199221)* | DE | 12p | C07C057-30 | |
| R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE | | | | | | |
| DE 4137683 | A | 19920521 (199222) | | 10p | C07H005-06 | <-- |
| AU 9187904 | A | 19920521 (199229) | | | C07H005-06 | <-- |
| CA 2055681 | A | 19920516 (199231) | | | C07H005-06 | <-- |
| HU 59692 | T | 19920629 (199231) | | | C07H005-06 | <-- |
| BR 9104997 | A | 19920623 (199232) | | | C07H005-06 | <-- |
| ZA 9109075 | A | 19920826 (199240) | | 27p | C07H000-00 | |
| CS 9103465 | A2 | 19920617 (199250) | | | C07H005-06 | <-- |
| CN 1061415 | A | 19920527 (199306) | | | C07H005-06 | <-- |
| EP 486046 | A3 | 19921209 (199344) | | | C07C057-30 | |
| NZ 240616 | A | 19931026 (199345) | | | C07H005-06 | <-- |
| AU 642309 | B | 19931014 (199348) | | | C07H005-06 | <-- |
| JP 06184003 | A | 19940705 (199431) | | 9p | A61K047-48 | |
| EP 486046 | B1 | 19960501 (199622) | DE | 18p | C07C057-30 | |
| R: AT BE CH DE DK FR GB IT LI LU NL SE | | | | | | |
| DE 59107759 | G | 19960605 (199628) | | | C07C057-30 | |
| JP 2542765 | B2 | 19961009 (199645) | | 8p | A61K047-48 | |
| US 5604206 | A | 19970218 (199713) | | 8p | A61K031-70 | |

ADT EP 486046 A2 EP 1991-119523 19911115; DE 4137683 A DE 1991-4137683 19911115; AU 9187904 A AU 1991-87904 19911115; CA 2055681 A CA 1991-2055681 19911115; HU 59692 T HU 1991-3572 19911114; BR 9104997 A BR 1991-4997 19911118; ZA 9109075 A ZA 1991-9075 19911115; CS 9103465 A2 CS 1991-3465 19911115; CN 1061415 A CN 1991-110740 19911115; EP 486046 A3 EP 1991-119523 19911115; NZ 240616 A NZ 1991-240616 19911115; AU 642309 B AU 1991-87904 19911115; JP 06184003 A JP 1991-354100 19911115; EP 486046 B1 EP 1991-119523 19911115; DE 59107759 G DE 1991-507759 19911115, EP 1991-119523 19911115; JP 2542765 B2 JP 1991-354100 19911115; US 5604206 A Cont of US 1991-792479 19911115, US 1994-328722 19940218
FDT AU 642309 B Previous Publ. AU 9187904; DE 59107759 G Based on EP 486046; JP 2542765 B2 Previous Publ. JP 06184003
PRAI DE 1990-4036460 19901115
REP No-SR.Pub; 2.Jnl.Ref; DE 2103387; DE 3205077; DE 3639038; DE 3700172; EP 398288; 1.Jnl.Ref
IC ICM A61K031-70; A61K047-48; C07C057-30; C07H000-00
ICS A61K031-13; A61K031-205; C07C215-10; C07H005-04
ICA A61K031-19; C07H005-06
AB EP 486046 A UPAB: 19931213
Hydrogen-bonded 1:1 complexes (I) of S(+)-phenylalkanoic acids (II) with amino sugars (III) are new. (I) are formed by a proton switch interaction between the COOH gp. in (II) and the 3-OOH gp. in (III): where R1-R3 are not defined. (II) must have a pKa of 3.5-3.9 w.r.t. the COOH gp., and (III) must have a pKa of 1.9-4.0 w.r.t. the 3-OH gp..
USE/ADVANTAGE - (I) are useful as prodrugs of (II), esp. S(+)-

**ibuprofen** (IIa) or S(+)-naproxen, which have analgesic, antiinflammatory, antipyretic and antimicrobial activity. On oral admin., (I) give higher blood levels of (II) in shorter times than (II) alone.
0/2

FS CPI
FA AB; GI; DCN
MC CPI: **B10-A07**; B10-C03; **B10-C04B**; **B10-C04C**; B12-A01; **B12-D01**; B12-D07; B12-D08
ABEQ EP 486046 A UPAB: 19931213
Hydrogen-bonded 1:1 complexes (I) of S(+)-phenylalkanoic acids (II) with amino sugars (III) are new. (I) are formed by a proton switch interaction between the COOH gp. in (II) and the 3-OOH gp. in (III): where R1-R3 are not defined. (II) must have a pKa of 3.5-3.9 w.r.t. the COOH gp., and (III) must have a pKa of 1.9-4.0 w.r.t. the 3-OH gp..
USE/ADVANTAGE - (I) are useful as prodrugs of (II), esp. S(+)-**ibuprofen** (IIa) or S(+)-naproxen, which have analgesic, antiinflammatory, antipyretic and antimicrobial activity. On oral admin., (I) give higher blood levels of (II) in shorter times than (II) alone.
ABEQ EP 486046 B UPAB: 19960604
Hydrogen-bridge-bound complexes having a stoichiometry of 1:1 comprising S(+)-phenyl alkane acids and amino sugars in which the complex bond is based on interactions of the carboxyl group of the S(+)-phenyl alkane acids and the hydroxyl group at the carbon atom (C3) of the amino sugars having a proton switch of the form (I) and (II); where R1-COOH denotes the S(+)-phenyl alkane acids and (III); denotes the amino sugars, the pKa values relating to the carboxyl group of the S(+)-phenyl alkane acids lying in the range of 3/5-3.9 and the pKa values relating to the hydroxyl group at the carbon atom (C3) of the amino sugars lying in the range of 1.9-4.0.
Dwg.1/2
ABEQ US 5604206 A UPAB: 19970326
Preparing a complex of an S(+)-phenyl alkanoic acid and amino sugar comprises:
(a) combining the S(+)-phenyl alkanoic acid with an aq. buffer soln. having a pH 5.5-7.5 at 20 deg. C;
(b) heating the combined acid and buffer soln. of step (a) to 40 deg. C with constant stirring until a clear transparent soln. is obtd. and all of the S(+)-phenyl alkanoic acid is dissolved;
(c) adjusting the pH of the soln. resulting from step (b) to 5.5-6.0 by the addn. of diluted phosphoric acid, then adding the amino sugar in an equimolar amt. relative to the S(+)-phenyl alkanoic acid to form a reaction mixt.; and
(d) after complex formation is complete, cooling the reaction mixt. to ppte. therefrom the complex in crystalline form, and recovering the pptd. complex from the reaction mixt.
Dwg.1/2

L128 ANSWER 10 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **1979-44860B** [24] WPIX
TI Analgesic and antiinflammatory glucosamide deriv. - specifically 2(p-isobutylphenyl)-propionic acid-D-glucosamide.
DC B03
PA (HOKR) HOKURIKU PHARM CO LTD
CYC 1
PI JP 54055545 A 19790502 (197924)*
PRAI JP 1977-121533 19771012
IC A61K031-70; C07H015-18
AB JP 54055545 A UPAB: 19930901
A D-glucosamide deriv. of formula (I) is new. It shows analgesic and anti-inflammatory activity and is useful as a pharmaceutical.
(I) is prepd. by reacting 2-(p-isobutyl-phenyl)propionyl chloride with D-**glucosamine**. The reaction may be performed by combining a soln. of 2-(p-isobutylphenyl)propionyl chloride in an organic solvent

with an aq. soln. of D-**glucosamine** which is prepd. by neutralising D-**glucosamine** hydrochloride with a strong base. Since D-**glucosamine** free base is unstable, the aq. soln. should be held fairly cooled. The strong base for the neutralisation of D-**glucosamine** hydrochloride may be NaOH or KOH.

Examples of the organic solvent to be used in the reaction include dioxane, chloroform and ether.

FS CPI
FA AB
MC CPI: **B10-A07**; **B12-D01**; B12-D07

L128 ANSWER 11 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **1972-55155T** [35] WPIX
TI Compns of **glucosamine** hydrochloride and anti-rheumatic - agent - for treatment of arthrosis and arthritis,with reduced toxicit.
DC B03
PA (OPFE) OPFERMANN AND SOHN JGW; (OPFE-N) OPFERMANN J G W &
CYC 1
PI DE 2103387 A (197235)*
DE 2103387 B 19810730 (198132)
PRAI DE 1971-2103387 19710126
IC A61K027-14; A61K031-70; A61K045-06
AB DE 2103387 A UPAB: 19930831
Prepns. contain active components in a molar ratio of 1:10 to 10:1. The anti-rheumatic agents used are mono-, di- or oxyphenylbutazone, indometacin, pyrazolone and/or salicyclic acid. Pref. prepns. contain 0.1-0.5 g. **glucosamine** HCl, 0.05-0.25 g. anti-rheumatic agent and opt. sulphates and/or iodides of alkali- and/or alkaline earth metals as well as sulphates and/or iodohydrates of organic basis with anti-rheumatic activity.
FS CPI
FA AB
MC CPI: B06-D01; B07-D08; **B10-A07**; B10-C03; **B12-D01**; B12-D03; B12-D07; B12-D08; B12-D09

L128 ANSWER 12 OF 12 WPIX (C) 2003 THOMSON DERWENT
AN **1966-26657F** [00] WPIX
TI Potentiation of neurotropic agents by **glucosamine**.
DC B00
PA (TECX) TECPAN SA
CYC 1
PI FR 48047 M (196800)*
PRAI FR 1965-27377 19650805
AB FR 48047 M UPAB: 19930831
- Use of **glucosamine** and salts thereof for potentiation of analgesics, sedatives, muscle relaxants, hypnotics, neuroplegic agents.

Preferred potentiator is **glucosamine** hydrochloride. Typical compounds potentiated are aspirin, paracetamol, phenylbutazone, anti-pyrine, amidopyrine, morphine and its derivatives, chloropromazine, promethazine, barbiturates.

Aspirin was tested against phenylbenzoquinone in mice (see Proc. Soc. Exp. Biol. and Med 1965, 118 763; abid. 1957, 95 729) and the ED50 was 130 mg/kg. compared with 19 mg/kg when potentiated with 20% w/w of **glucosamine** hydrochloride.

(a) Tablets contain aspirin 250 mg. glucurono-lactone 100 mg; **glucosamine** HCl 150 mg. and excipient q.s. Dose 4-6 tabs. daily for treatment of rheumatism

(b) Tablets contain phenobarbitone 10 mg. **glucosamine** HCl 100 mg. Daily dose 1-4 tablets.

FS CPI
FA AB
MC CPI: **B10-A07**; B12-C07; B12-C08; B12-C09; B12-C10;

**B12-D01**; B12-D03; B12-D09; B12-E02

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=> d his

     (FILE 'HOME' ENTERED AT 10:34:45 ON 27 JAN 2003)
           SET COST OFF

     FILE 'REGISTRY' ENTERED AT 10:34:56 ON 27 JAN 2003
L1           3 S 3416-24-8 OR 29031-19-4 OR 66-84-2
             E .ALPHA.-GLUCOSAMINE/CN
L2           1 S E4
L3           1 S 6490-70-6
             E .BETA.-GLUCOSAMINE/CN
L4           1 S E4
L5           1 S 14257-69-3
             E N-ACETYL-D-GLUCOSAMINE/CN
L6           1 S E3
L7         297 S (7512-17-6 OR 3416-24-8 OR 6490-70-6 OR 14257-69-3)/CRN
L8          37 S L7 AND (7664-93-9/CRN OR CLH)
L9           8 S L8 AND 2/NC
L10         12 S L1-L6,L9
L11          1 S IBUPROFEN/CN
L12          1 S KETOPROFEN/CN
L13         18 S C13H18O2/MF AND 46.150.18/RID AND 1/NR AND BENZENEACETIC AND
L14         13 S L13 AND 2 METHYLPROPYL
L15          3 S L14 AND IBUPROFEN
L16         15 S L13 NOT L15
L17         12 S C16H14O3/MF AND 46.150.18/RID AND 2/NR AND BENZENEACETIC AND
L18          3 S L17 AND KETOPROFEN
L19          9 S L17 NOT L18
L20          6 S L11,L12,L15,L18
             SEL RN
L21        426 S E1-E6/CRN
L22          2 S L21 AND L7

     FILE 'HCAPLUS' ENTERED AT 10:44:09 ON 27 JAN 2003
L23       9874 S L10
L24      27519 S ?GLUCOSAMINE? OR ACETYLGLUCOSAMINE OR ACETYL (1W) GLUCOSAMINE
L25      29352 S L23,L24
L26       8313 S L20
L27       8906 S IBUPROFEN OR KETOPROFEN
L28      10023 S L26,L27
L29       4491 S NSAID
L30      11691 S (NONSTEROID? OR NON STEROID?)(L)?INFLAM?
L31      49473 S ANALGES?
               E ANALGESIC/CT
               E E6+ALL
L32      27328 S E5
L33      54026 S E5+NT
               E E22+ALL
L34      17760 S E5+NT
               E ANTIINFLAM/CT
               E E5+ALL
L35      19798 S E2
               E E2+ALL
L36      24177 S E4,E5
L37      28056 S E3+NT
L38         36 S L25 AND L28
L39        329 S L25 AND L29-L37
L40         23 S L38 AND L39
L41         36 S L38,L40
               E ANTIARTHRITIC/CT
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                E E4+ALL
L42         4488 S E5,E4+NT
                E ANTIHISTAMIN/CT
L43         1153 S E5-E7
                E E4+ALL
L44         6793 S E5,E4+NT
                E MUSCLE RELAXANT/CT
L45         5669 S E4-E10
                E E4+ALL
L46         8857 S E5,E6,E4+NT
                E DECONGESTANT/CT
L47          431 S E4,E5
                E E4+ALL
L48          431 S E4
                E BRONCHODIAL/CT
L49         5474 S E7-E9
                E E7+ALL
L50         9708 S E5,E4+NT
L51        66379 S ANTIARTHRIT? OR ANTIHISTAMIN? OR ANTI()(ARTHRIT? OR HISTAMIN?
L52          147 S L25 AND L42-L51
L53          120 S L52 AND L39
L54           13 S L52 AND L41
L55           13 S L40 AND L54
                SEL DN AN 3 10 11
L56            3 S E1-E9
L57          131 S L41,L52,L53 AND L23
L58           26 S L57 AND L26
L59           23 S L58 NOT L56
L60           15 S L59 NOT L55
                SEL DN AN 11
L61            1 S L60 AND E10-E12
L62            2 S L22
L63            6 S L56,L61,L62
                E RAFFA R/AU
L64          177 S E4-E9
                E COWAN A/AU
L65          236 S E3-E15,E17,E20,E21
                E TALLARIDA R/AU
L66          103 S E4-E6
L67            1 S L64-L66 AND L25
L68            6 S L63,L67 AND L23-L67
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 11:00:56 ON 27 JAN 2003
L69           11 S E1-E11
L70           10 S L69 NOT C16H25NO2
L71            1 S L69 NOT L70

     FILE 'REGISTRY' ENTERED AT 11:01:43 ON 27 JAN 2003

     FILE 'HCAPLUS' ENTERED AT 11:02:03 ON 27 JAN 2003

     FILE 'REGISTRY' ENTERED AT 11:03:00 ON 27 JAN 2003
L72           10 S L10,L20 NOT L69

     FILE 'EMBASE' ENTERED AT 11:03:31 ON 27 JAN 2003
L73        12569 S L25
L74        18148 S L28
L75        18174 S ?KETOPROFEN? OR ?IBUPROFEN?
L76           76 S L73 AND L74,L75
L77           39 S L76 AND GLUCOSAMINE ?/CT
                E GLUCOSAMINE/CT
                E E40+ALL
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L78          37 S (GLUCOSAMINE?(L)CB)/CT
L79           3 S L77 AND L78
                E ANALGESIC/CT
                E E6+ALL
L80      280444 S E3+NT
L81         291 S L80 AND L73
L82          18 S L78 AND L81
L83          15 S L82 NOT L79
                SEL DN AN L83 10
L84           1 S E1 AND L83
L85         291 S L76,L81
L86          78 S L85 AND (COADMIN? OR COMEDIC? OR COPRESCRI? OR COTHERAP? OR C
L87          15 S L86 NOT AB/FA
L88          63 S L86 NOT L87
L89          54 S L88 AND PY<=2001
                SEL DN AN 5 6 13 30 49
L90           5 S L89 AND E2-E8
L91           5 S L84,L90 AND L73-L90

     FILE 'EMBASE' ENTERED AT 11:20:59 ON 27 JAN 2003

     FILE 'WPIX' ENTERED AT 11:21:23 ON 27 JAN 2003
L92        1860 S L24
                E GLUCOSAMINE/DCN
                E E3+ALL
L93         397 S E2 OR 1615/DRN
L94          47 S E4
L95           2 S E6
                E ACETYLGLUCOSAMINE/DCN
                E E4+ALL
L96         135 S E2
L97         773 S C07H005-06/IC,ICM,ICS
L98        2655 S L92-L97
L99        1931 S L24/BIX
L100       2712 S L98,L99
L101       1902 S (?KETOPROFEN? OR ?IBUPROFEN?)/BIX
                E KETOPROFEN/DCN
                E E3+ALL
L102        674 S E2
L103          1 S E4
L104        278 S E8
L105          8 S E10
                E IBUPROFEN/DCN
                E E3+ALL
L106       1621 S E2 OR 1987/DRN
L107          3 S E4
L108        478 S E8
L109         14 S E10
L110          4 S E14
L111         28 S E20
L112         22 S L100 AND L101-L111
L113         15 S L112 AND M782/M0,M1,M2,M3,M4,M5,M6
L114          1 S L112 AND (B14-S09 OR C14-S09 OR B12-C09 OR C12-C09)/MC
L115          1 S L112 AND P861/M0,M1,M2,M3,M4,M5,M6
L116         15 S L113-L115
L117         76 S (B14-C01 OR C14-C01 OR B12-D01 OR C12-D01)/MC AND L100
L118         75 S (P411 OR PR12)/M0,M1,M2,M3,M4,M5,M6 AND L100
L119         83 S L117,L118
L120          1 S L112-L119 AND (RAFFA R? OR COWAN A? OR TALLARIDA R?)/AU
L121         37 S L112-L119 AND (B10-A07 OR C10-A07)/MC
L122         15 S L112-L119 AND (B10-C04B OR C10-C04B OR B10-C04C OR C10-C04C)/
L123          6 S L121 AND L122
                SEL DN AN 1 3 4 5
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L124          4 S L123 AND E1-E8
L125          4 S L120,L124
L126         45 S L112-L116,L121-L122 NOT L123-L125
                SEL DN AN 7 12 16 18 21 42 44 45
L127          8 S E9-E22
L128         12 S L125,L127 AND L92-L127

     FILE 'WPIX' ENTERED AT 11:43:53 ON 27 JAN 2003
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